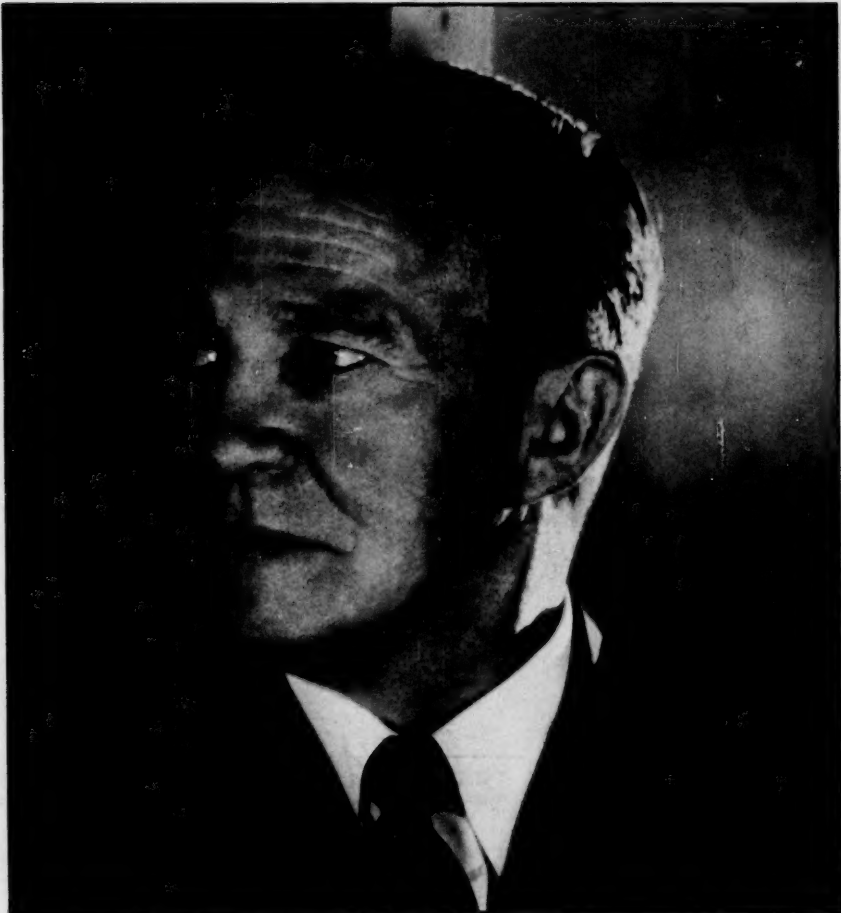


MANUFACTURERS RECORD



A. Boyd Campbell of Jackson, Mississippi
New President of Chamber of Commerce of the United States

SPECIAL

CB&I TANK FOR CORROSION-RESISTANT STORAGE

How to store a 60% bulk solution of nitric acid without corrosion? The Commercial Solvents Corporation, Dixie Chemical Division, Sterlington, La., solved the problem with a Horton® tank built of stainless steel. The tank, 35-ft. in diameter by 35-ft. high, is shown below. Chicago Bridge & Iron Company also builds special tanks for the storage of acetic acid, ammonia, anhydrides and other corrosive materials. Write our nearest office for estimates or quotations.



Chicago Bridge & Iron Company

Atlanta • Birmingham • Boston • Chicago • Cleveland • Detroit • Houston
Los Angeles • New York • Philadelphia • Pittsburgh • Salt Lake City
San Francisco • Seattle • Tulsa

Plants in BIRMINGHAM, CHICAGO, SALT LAKE CITY and GREENVILLE, PA.

still **THE TREND IS SOUTHEAST**

The Seaboard Southeast is proven ground for industry. The vast number of new enterprises established in this area during the past three decades furnish eloquent testimony to that fact. Various types of industry are represented—chemicals, textiles, pulp and paper, synthetic fibers, food processing, appliances, metal working, machinery and a host of others.

The trend Southeast continues at accelerated pace. There are still many communities in this area with large reservoirs of available labor and where other conditions are ideal for industry.

Seaboard's Industrial Department has assisted many of the nation's outstanding concerns in finding just the right locations for their plants. We will gladly render you a similar service without cost or obligation. Let us submit recommendations based on your individual requirements. All inquiries will be held in strict confidence.

Warren T. White
Assistant Vice President
Seaboard Air Line Railroad Company
Norfolk 10, Virginia





INSULATED

METAL WALLS

for INDUSTRIAL and COMMERCIAL BUILDINGS

ALUMINUM, STAINLESS or GALVANIZED STEEL

Architects and owners across the country are today turning to Insulated Metal Walls for low-cost permanence in new, modern buildings of virtually every type. These new light-weight, metal curtain walls are not only flexible in adaptation to building types, but present unlimited possibilities in architectural treatment of exterior design. Bright areas of aluminum or stainless steel in combination with brick, glass block, stained wood, tinted cement plaster, or other materials, offers designers a broad field in the development of distinctive and individualized exteriors. The industrial building below is a typical example. In this type of construction, important building economies are realized through lower material cost, low labor cost, and the cumulative savings and other advantages deriving from reduced construction time . . . buildings can be quickly enclosed with Insulated Metal Walls—even under extreme low temperature conditions. Mahon Insulated Metal Walls are available in the three exterior patterns shown at left . . . the "Fluted" or "Ribbed" wall can be field erected up to sixty feet in height without a horizontal joint—a feature of Mahon Walls which, from an appearance standpoint, is extremely important in powerhouses, auditoriums or other types of buildings where high expanses of unbroken wall surface are common. See Sweet's for complete information including specifications, or write for Mahon Catalog B-55-B.

FLUSH, RIBBED, or FLUTED
Over-all "U" Factor of Various Types is Equivalent
to or Better than Conventional 16" Masonry Wall

THE R. C. MAHON COMPANY

Detroit 34, Mich. • Chicago 4, Ill. • Representatives in All Principal Cities

Manufacturers of Insulated Metal Walls and Wall Panels; Steel Deck for Roofs, Partitions and Permanent Concrete Floor Forms; Rolling Steel Doors, Grilles and Underwriters' Labeled Automatic Rolling Steel Fire Doors and Fire Shutters.



MAHON

MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest

Volume 124

April, 1955

Number 4

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COVER ILLUSTRATION: see Southerners at Work
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MANUFACTURERS RECORD PUBLISHING CO.

Publishers of Manufacturers Record, Daily Construction
Bulletin and Blue Book of Southern Progress.

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109 MARKET PLACE, BALTIMORE 3, MARYLAND
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APRIL NINETEEN FIFTY-FIVE

There's a
Big difference
in steel
buildings...



A Butler steel building houses the Santa Cruz plant of A. R. Wood & Co., manufacturers of brooders and poultry equipment.

take **BUTLER**
factory-finished
roof and
side panels

... for instance. It's easy to spot Butler steel buildings. They have that pleasing, tailor-made look. Butler quality is more than skin-deep, too. Every single roof and side panel is factory die-formed, precision sheared and punched. These precision operations guarantee a building that permanently seals out tropic heat or arctic cold. Superior panels are **ONLY ONE** feature that makes Butler your best steel building buy ... priced at the lowest figure you can safely pay for a *quality* building. Mail coupon today for all the facts.



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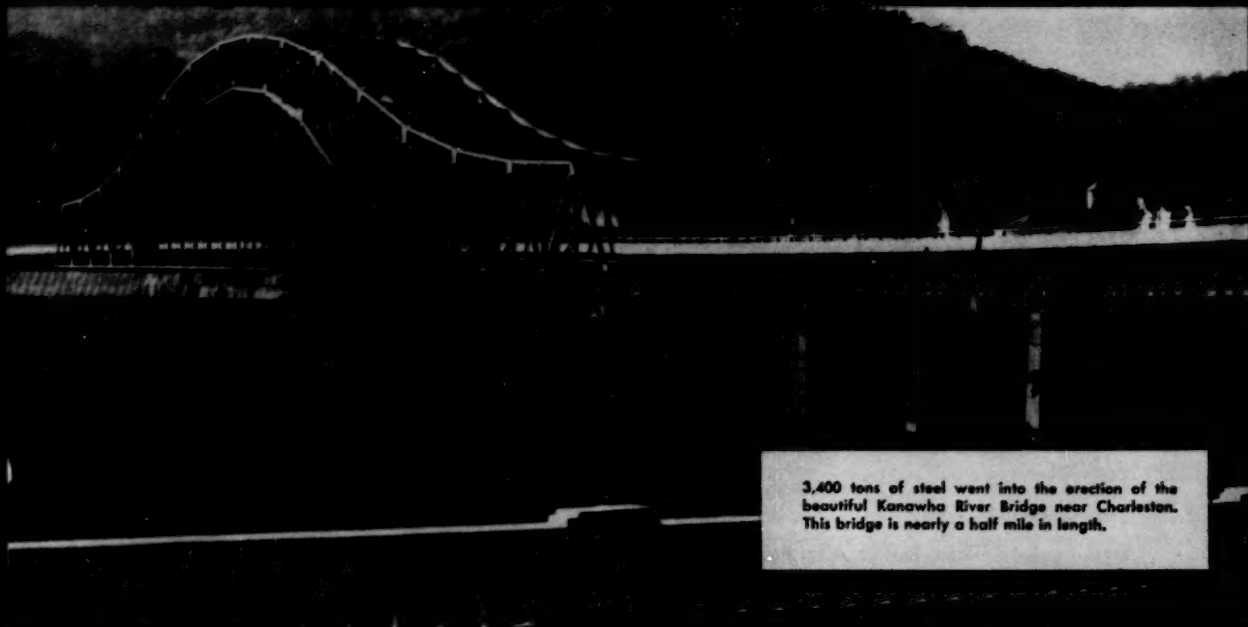
For prompt reply address office nearest you:
BUTLER MANUFACTURING CO.
904 Avenue W. Ensley, Birmingham 5, Ala.

Please mail more information on
Butler steel buildings.

Name

Address

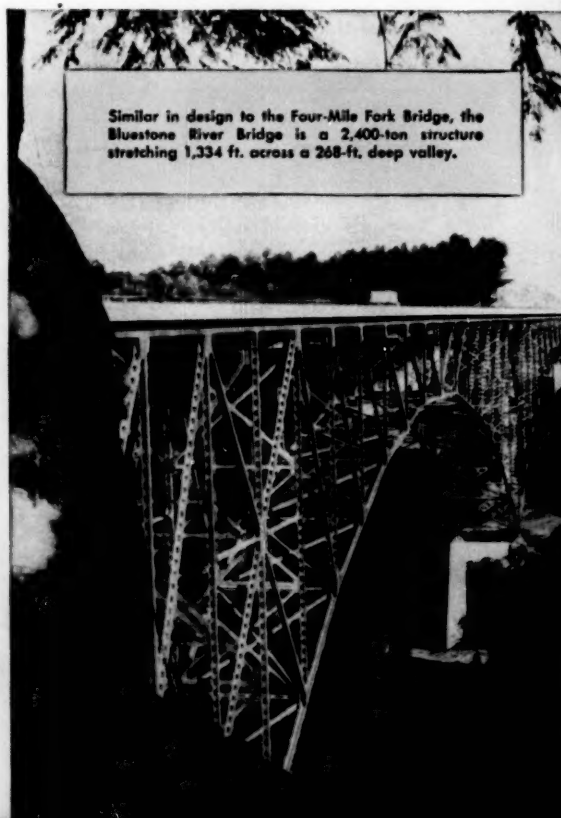
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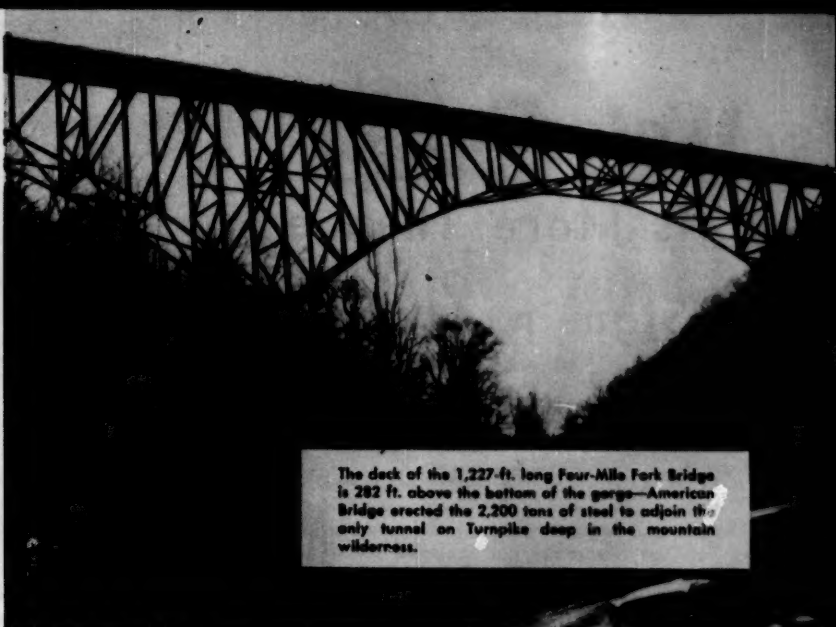
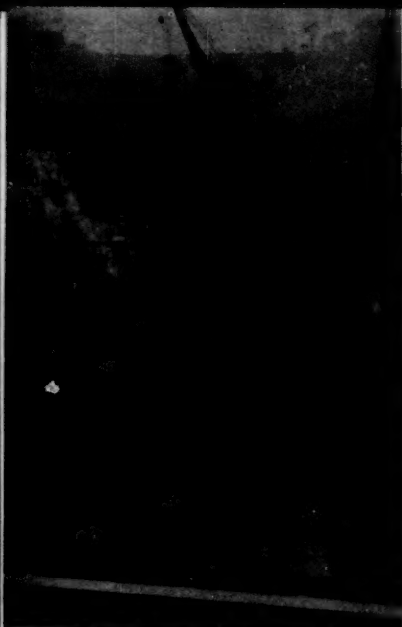
3,400 tons of steel went into the erection of the beautiful Kanawha River Bridge near Charleston. This bridge is nearly a half mile in length.

ALL 76 BRIDGES ON WEST VIRGINIA

**World's largest builder of bridges sets record in erecting
19,000 tons of steelwork on rugged mountain expressway**



Similar in design to the Four-Mile Fork Bridge, the Bluestone River Bridge is a 2,400-ton structure stretching 1,334 ft. across a 268-ft. deep valley.



The deck of the 1,227-ft. long Four-Mile Fork Bridge is 282 ft. above the bottom of the gorge—American Bridge erected the 2,200 tons of steel to adjoin the only tunnel on Turnpike deep in the mountain wilderness.

TURNPIKE ERECTED IN 11½ MONTHS

by AMERICAN BRIDGE

Constructed over, around and under some of the most treacherous mountain terrain east of the Rockies, the new West Virginia Turnpike is one of the nation's best stretches of highway. And one of the most bridged. For it has 76 bridges along its 87-mile length. That's almost a bridge a mile!

But equally interesting is the fact *one single company* erected the structural steelwork for *all 76 bridges*. And did it in just 11 months and 17 days!

AMERICAN BRIDGE put 19,000 tons of structural steel into these bridges, three of which are major structures as you can see from the photographs shown here. The 73 minor bridges averaged 230 ft. in length. In addition to erecting all 76 bridges, AMERICAN BRIDGE fabricated approximately 14,000 tons of steelwork, including the three major bridges.

The engineering "know-how" and the skilled manpower that AMERICAN BRIDGE brought to this vast bridge-building project *enabled this one single company to handle this big job in its*



entirety in record time. This same kind of service is available *anytime, anywhere* to help you save time and money on any project involving the fabrication and erection of structural steelwork.

AMERICAN BRIDGE welcomes an opportunity to estimate on your next job. For a detailed discussion of your plans, just contact the office nearest you.

OWNERS:

West Virginia Turnpike Commission

General Consultants and Designers of Bridges:

Howard, Needles, Tammen & Bergendoff

Erection of Steelwork for all Bridges:

American Bridge Division, United States Steel Corp.

See "THE UNITED STATES STEEL HOUR"—Televised alternate weeks—Consult your newspaper for time and station.

AMERICAN BRIDGE DIVISION, UNITED STATES STEEL CORPORATION

GENERAL OFFICES: 525 WILLIAM PENN PLACE, PITTSBURGH, PA.

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AMERICAN BRIDGE



UNITED STATES STEEL

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is More Than a
Sign in Alabama
Communities



"WELCOME" is an essential ingredient in a new industrial location—that kind of welcome that makes itself known by the tone of the voice, the sparkle of the eye and the warmth of a handclasp. This friendly *attitude* of welcome has been experienced by many locating in Alabama.

Besides a wholehearted welcome, Alabama—located in the center of a large market area—offers such physical necessities as satisfactory sites, transportation, adequate help and raw materials.

Your inquiry, addressed to our Industrial Development Division, will bring you facts about communities well adapted to your type of manufacturing operation.

INDUSTRIAL DEVELOPMENT DIVISION

Alabama Power Company

Birmingham, Alabama

Helping Develop Alabama

BUSINESS TRENDS

Business Improves On Wide Front

Outstanding Gains Are Seen in Autos and Steel With Both Consumer
And Capital Expenditures Flourishing

With the first quarter of 1955 having come to a close there is no doubt that business is improving along a wide front.

Paced by Construction and Automobile Production, all branches of industry with the exception of Farming and Mining are registering gains of varying extent.

Construction Leads

For more than a year the Construction industry has bellwethered the National economy.

At last reports the industry, far from showing signs of slackening, is ringing up new records steadily.

The \$2.8 billion outlay for January and \$2.6 billion in February, for new construction alone, were new highs for both months. And in addition unrecorded billions for improvement and repair place this industry in the forefront of economic activity as 1955 gives indication of surpassing 1954 in total business volume.

Some forecasters even go so far as to predict that 1955 will exceed 1953 in total business volume which would make the current year the best in all history.

Several tests will be encountered, however, before these predictions can be set down as fact, chief of which will be the trend of automobile sales in the third and final quarters of the year.

Autos and Steel

As automobiles go, so goes Steel, would be an apt summary for the present situation. During the present high level of auto output, steel is responding with better than expected resurgency.

By the first of April steel output had already gone above 94 per cent of capacity, a rise from a low or around 60 per cent last year. The current tonnage rate is close to the record level of 1953.

Capital Investment Active

Adding impetus to economic gains, expenditures and intended expenditures for Capital Goods have moved upward.

According to the Securities & Exchange Commission, American Business now expects new plant and equipment outlays this year to total about \$27 billion, somewhat above expenditures for 1954.

Capital expenditures are expected to turn definitely upward in the second quarter of the current year.

Business also anticipates that 1955 will see an over-all increase in sales amounting to five per cent.

Investment programs of Commercial concerns show greatest forthcoming strength with gain of 7 per cent over 1954.

Public Utilities rank second in intended increases, planning to spend 4 per cent more than in 1954.

Manufacturers expect a decline of 3 per cent in plant expenditures and Railroads and Mines also are looking forward to reduced rates of investment.

Consumer Industries Strong

In addition to automobiles and residences, other consumer-spurred industries are humming.

Sales of Retail stores at large throughout the Nation reached an alltime high during the Christmas shopping period of 1954 and have maintained at similarly high levels during the early months of 1955.

During January, for which month completed figures have been reported, Retail sales were seven per cent higher than in January 1954, and preliminary reports for February indicate sales of about six per cent higher than in February 1954.

Sales of home furnishings and appliances have joined automobiles in the upward surge.

Employment Situation Brighter

U. S. Department of Labor reports that nonfarm employment, at 47.8 million in February was unchanged from January contrasting with customary seasonal declines that usually take place between these months.

Increase in factory employment offset declines occurring in other industries.

The factory workweek was reported up from 40.2 to 40.5 hours, and gross weekly pay of factory workers rose almost a dollar to \$74.93 in February—an alltime high.

A sharp reduction in layoffs and continuation of a rapid hiring rate indicates forthcoming expansion of employment.

South Keeps Pace

With few exceptions the 16 Blue Book states of the South are keeping full pace with the Nation at large as business expands.

Farming in the South for January was off somewhat more than in the rest of the country, and bituminous coal mining continues to be a sore spot. Other mining and oil extraction, on the other hand, are showing considerable signs of improvement.

In trade also the South shows the same rate of gains as those observed for the entire country, indicating that consumer industries are flourishing and that purchasing power is still unimpaired in the South.

Both South and United States show total Business Volume gain of one per cent over the same period of 1954.

spotlight

ON A FAST-GROWING REGION



FINANCIAL STATEMENT AS OF DEC. 31, 1954

<i>Assets</i>	PER CENT	AMOUNT
U.S. Government Securities	8.68	\$ 9,526,530.33
State, County and Municipal Bonds	11.29	12,390,331.86
Railroad Bonds	1.28	1,402,741.28
Public Utility Bonds	19.64	21,563,417.90
Industrial and Miscellaneous Bonds	4.52	4,961,789.14
Stocks	2.80	3,071,115.00
Mortgages (First Liens)	42.49	46,641,602.80
Real Estate:		
Offices (Including Branches)	2.98	3,271,509.20
Investment	1.41	1,542,311.11
Policy Loans98	1,081,614.83
Cash	1.45	1,593,851.68
Interest and Rents Due and Accrued56	618,919.62
Premiums in Course of Collection (Net)	1.92	2,103,194.60
Miscellaneous Assets00	2,676.00
Total Assets	100.00	\$109,771,605.35
<i>Liabilities & Surplus</i>		
Policy Reserves		\$ 85,165,460.88
Claims in Process of Settlement		349,550.83
Reserve for Unreported Claims		208,434.47
Premiums and Interest Paid in Advance		1,006,453.36
Estimated Amount Due and Accrued for Taxes		908,372.28
Reserve for Pension Plan		6,812,117.15
Agents' Bonds: Reserve and Interest		542,622.50
Security Valuation Reserve		580,309.93
Miscellaneous Liabilities		755,528.09
Total Liabilities Except Capital		\$ 96,328,849.49
Capital		\$ 7,000,000.00
Unassigned Surplus Funds		6,442,755.86
Capital and Surplus		\$ 13,442,755.86
Total		\$109,771,605.35

Across the nation headlines tell of the swift and steady economic growth throughout the South. To keep pace with the life insurance needs of this rapidly growing area, Life Insurance Company of Georgia is constantly expanding the scope of its insurance plans and of its service to policyholders.

HIGHLIGHTS

Life Insurance in Force	\$1,140,434,544
Gain of \$79,744,977 in one year	
Assets	\$ 109,771,605
Increase of \$15,566,393 over 1953	
Paid Policyholders & beneficiaries	\$ 11,050,384
Liabilities	\$ 96,328,849
Liabilities include policy reserves	
Surplus Funds and Capital	\$ 13,442,756



➤ MORE THAN A BILLION DOLLARS OF LIFE INSURANCE IN FORCE

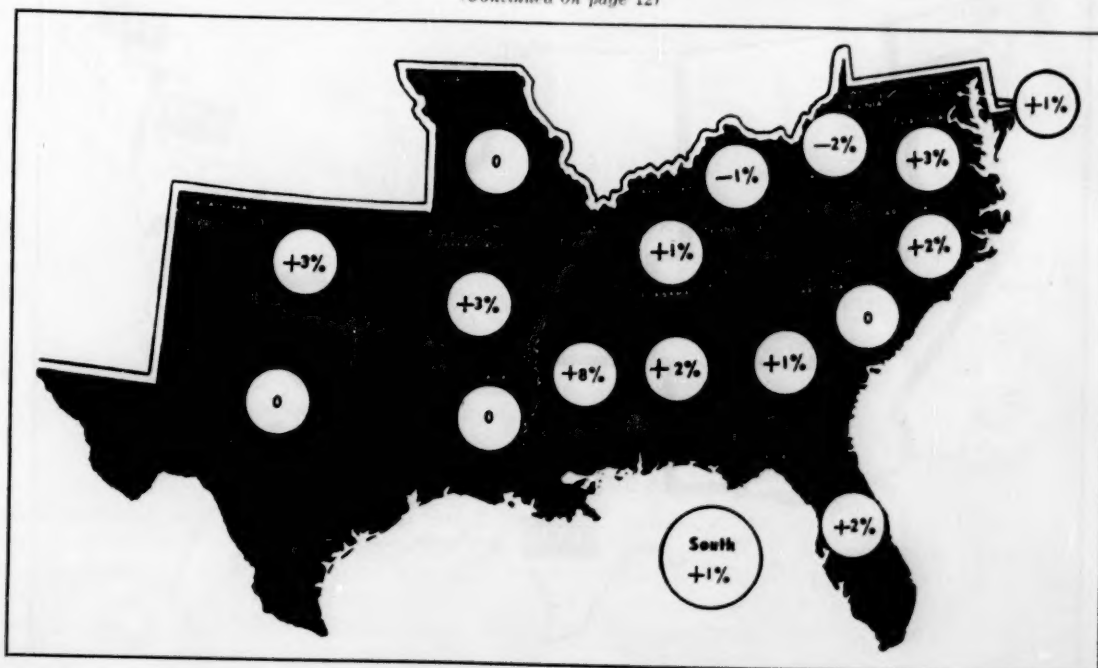
MANUFACTURERS RECORD FOR

SOUTHERN BUSINESS VOLUME

Business Volume by States (\$ Million)
January 1955 with gain (or loss) over January 1954

	Farm- ing	Min- ing	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Service Trade	Busi- ness Volume
Ala.	\$ 26 -10%	\$ 9 even	\$ 35 +25%	\$ 235 even	\$ 35 -1%	\$ 30 +1%	\$ 163 +1%	\$ 171 +5%	\$ 30 +2%	\$ 734 +2%
Ark.	58 even	10 -1%	20 +66%	77 even	21 -1%	12 even	80 +1%	103 +2%	15 even	396 +3%
D. C.	—	—	20 +25%	19 even	23 -1%	31 -1%	130 -1%	127 +8%	27 even	377 +2%
Fla.	60 +15%	7 even	93 +8%	130 +10%	57 +1%	59 +3%	265 -7%	329 +4%	55 even	1,055 +2%
Ga.	39 even	3 even	59 +28%	339 +4%	50 -1%	43 even	373 -5%	214 +3%	44 +1%	1,164 +1%
Ky.	118 -9%	29 -9%	41 -25%	260 even	41 -1%	24 +1%	217 -3%	212 +10%	29 even	971 -1%
La.	35 -4%	80 +12%	52 even	241 -9%	58 -1%	32 +2%	207 +5%	197 +6%	31 +2%	933 even
Md.	15 -10%	1 even	64 +18%	315 -2%	52 -4%	47 even	276 even	242 +9%	38 +1%	1,050 +1%
Miss.	44 even	9 -2%	19 +25%	88 +4%	19 -1%	12 even	100 +6%	107 +10%	17 +3%	415 +8%
Mo.	79 -3%	8 -1%	65 +30%	474 -5%	91 -3%	80 even	658 -1%	367 +10%	76 +1%	1,898 even
N. C.	32 -10%	2 even	52 -10%	558 even	48 -3%	37 +3%	336 +5%	254 +10%	41 -1%	1,360 +2%
Okla.	37 even	54 +1%	35 even	151 even	36 -1%	26 even	174 +4%	181 +10%	29 -1%	723 +3%
S. C.	15 even	1 even	39 -7%	233 even	19 -1%	17 +1%	105 -1%	142 even	19 even	590 even
Tenn.	56 -5%	5 even	63 +16%	280 -1%	42 -3%	38 +2%	371 even	222 +5%	42 +1%	1,119 +1%
Tex.	155 -20%	266 even	175 +3%	859 even	161 -5%	131 +1%	827 even	725 +4%	129 -3%	3,428 even
Va.	35 -7%	8 -1%	64 +28%	354 even	58 -2%	46 +3%	220 +11%	240 +5%	42 +4%	1,067 +3%
W. Va.	11 -8%	48 -20%	17 -5%	135 -5%	35 -2%	15 +1%	83 -5%	114 +5%	18 -1%	476 -2%
South	815 -7%	540 -1%	913 +8%	4,748 even	846 -2%	680 +2%	4,585 even	3,947 +7%	682 +1%	17,756 +1%

(Continued on page 12)

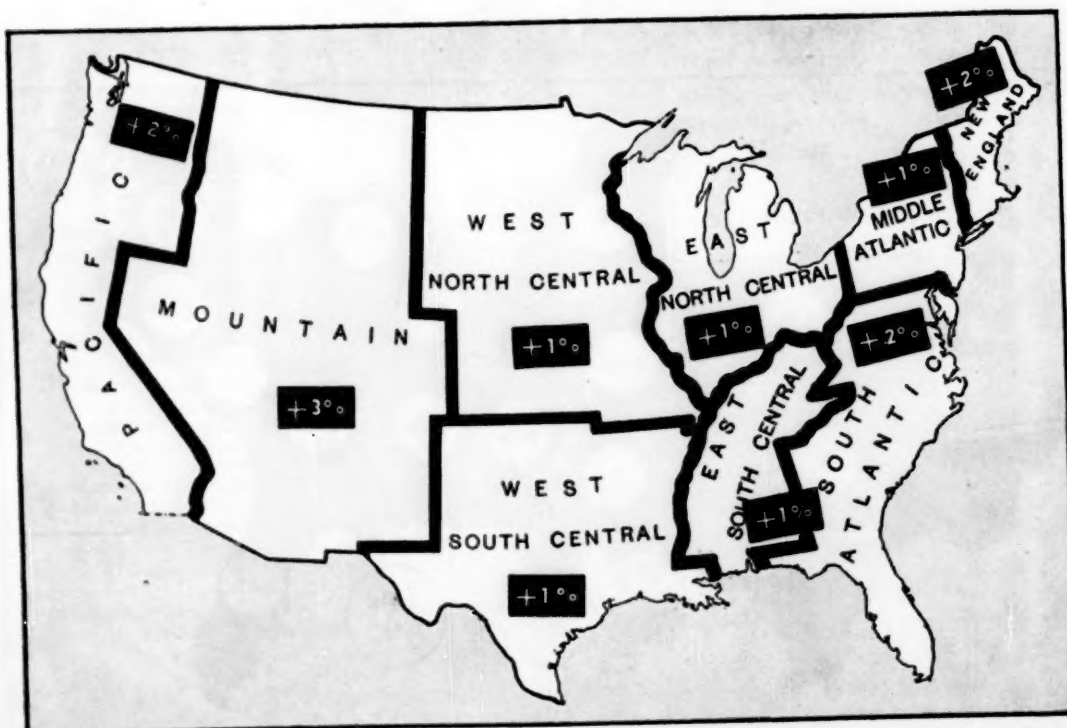


NATIONAL BUSINESS VOLUME

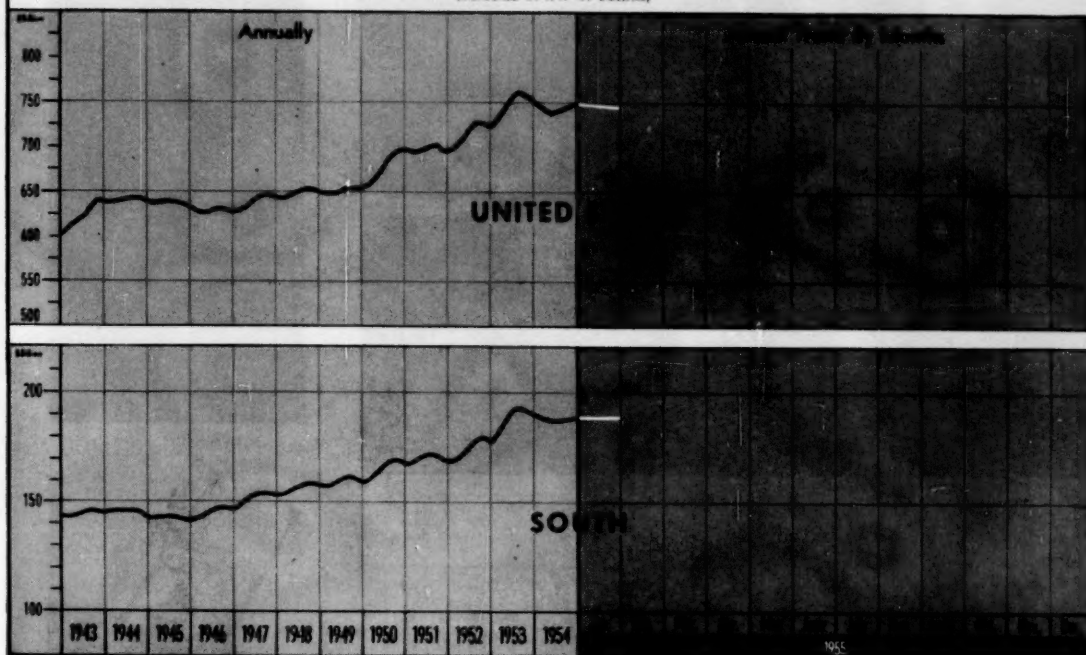
Business Volume by Regions (\$ Million)
January 1955 with gain (or loss) over January 1954

	Farm- ing	Min- ing	Con- struc- tion	Manu- factur- ing	Utili- ties	Fi- nance	Whole- sale Trade	Re- tail Trade	Serv- ice Trade	Busi- ness Volume
New Eng.	\$ 64 +8%	\$ 4 even	\$ 157 +30%	\$ 1,454 even	\$ 155 even	\$ 210 even	\$ 814 -1%	\$ 908 +6%	\$ 160 +5%	\$ 3,926 +2%
Mid. Atl.	146 -5%	69 -24%	564 +21%	4,927 -1%	689 -3%	809 +1%	5,428 +1%	2,669 +8%	758 +1%	16,059 +1%
E. N. Cen.	515 +3%	71 -5%	550 +18%	6,431 -1%	601 -2%	550 +2%	4,172 even	2,926 +5%	608 +2%	16,424 +1%
W. N. Cen.	755 -4%	76 -5%	224 +21%	1,565 -1%	283 -2%	232 +2%	2,019 even	1,277 +8%	215 +2%	6,646 +1%
S. Atl.	213 -1%	70 -10%	420 +9%	2,138 even	349 -2%	302 +2%	1,824 even	1,700 +5%	290 +1%	7,306 +2%
E. S. Cen.	244 -6%	52 -3%	158 +4%	863 even	137 -2%	104 +2%	851 even	712 +9%	118 +3%	3,239 +1%
W. S. Cen.	285 -15%	410 +2%	282 +5%	1,328 -1%	276 -2%	201 +2%	1,288 -1%	1,206 +6%	204 -1%	5,480 +1%
Mount.	195 -3%	125 even	103 +13%	332 -2%	116 -2%	71 +2%	443 +3%	473 +22%	81 +1%	1,939 +3%
Pacif.	276 even	103 -2%	329 +9%	1,992 even	316 -2%	296 +2%	1,678 -1%	1,413 +5%	355 even	6,758 +2%
U. S.	2,693 -3%	980 -3%	2,787 +14%	21,030 -1%	2,922 -2%	2,775 +2%	18,517 even	13,284 +7%	2,789 even	67,777 +1%

(Continued from page 11)



PHYSICAL VOLUME
OF
ALL GOODS AND SERVICES TURNED OUT BY PRIVATE ENTERPRISE
(MEASURED IN 1947-49 DOLLARS)



Regional Indicators

Farm Marketings (\$ Mil.)

	Jan. 1955	Dec. 1954	Jan. 1954
South	\$ 730	\$ 999	\$ 797
Other States	\$1,806	\$1,780	\$1,835
United States	\$2,536	\$2,779	\$2,632

Construction (\$ Mil.)

	Jan. 1955	Dec. 1954	Jan. 1954
South	\$ 913	\$ 985	\$ 840
Other States	\$1,874	\$2,000	\$1,587
United States	\$2,787	\$2,985	\$2,427

Mineral Output (\$ Mil.)

	Jan. 1955	Dec. 1954	Jan. 1954
South	\$ 540	\$ 546	\$ 551
Other States	\$ 440	\$ 443	\$ 479
United States	\$ 980	\$ 989	\$1,030

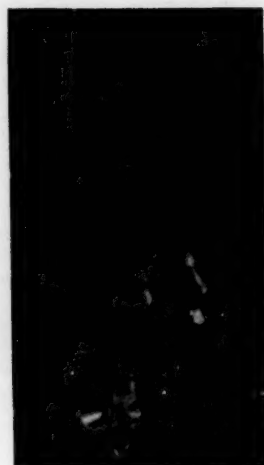
Manufacturing (\$ Mil.)

	Jan. 1955	Dec. 1954	Jan. 1954
South	\$ 4,748	\$ 4,669	\$ 4,774
Other States	\$16,282	\$16,119	\$16,564
United States	\$21,030	\$20,788	\$21,338

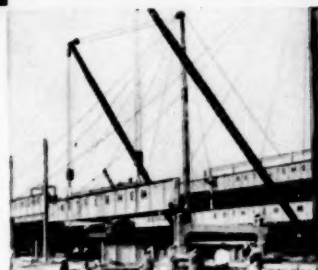
National Indicators

	Latest Month	Previous Month	Year Ago
Personal Income (\$ Bil.)	\$ 290.7	\$ 291.4	\$ 284.9
Ave. Weekly Earnings (Mfg.) ..	\$ 73.97	\$ 74.30	\$ 70.92
Consumer Credit (\$ Mil.) ..	\$ 29,684	\$ 30,125	\$ 28,724
New Mfg. Orders	\$ 25,220	\$ 24,704	\$ 20,882
Mfg. Inventories (\$ Mil.)	\$ 44,050	\$ 44,017	\$ 46,722
Trade Inventories (\$ Mil.) ...	\$ 32,740	\$ 32,232	\$ 33,307
Bank Debits (\$ Mil.)	\$163,382	\$186,317	\$154,281

	Latest Month	Previous Month	Year Ago
Ave. Weekly Hours (Mfg.)	40.2	40.6	39.4
Carloadings	2,575	2,518	2,967
Consumer Prices ('47-'49=100) ..	114.3	114.6	115.2
Retail Prices ('35-'39=100)	207.3	207.6	209.5
Wholesale Prices ('47-'49=100) ..	110.1	109.5	110.9
Construction Costs ('47-'49=100) ..	123.5	123.0	121.9
Electric Output (mil. kw. hrs.) ..	50,404	49,887	45,478



*Quick... Quick...
Quick Deliveries*



OF BETHLEHEM ROPE

Very near you — perhaps only a few blocks away — is a Bethlehem mill depot or distributor with big, complete stocks of the wire rope you want. When you're rushed — when you need wire rope in a hurry — use the telephone; give us the specifications and tell us to get your order rolling. Or, if you prefer, send your own truck and we'll have the reels waiting for you.

Bethlehem makes a type and grade of rope for every need. Big ones capable of handling many tons — for cranes, derricks, shovels, etc. Small ones for light industrial applications such as air

and electric hoists. And intermediate sizes for the vast range of jobs between the two extremes.

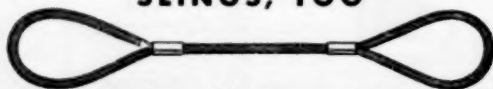
So, when hours or minutes count, give us a ring, or call the nearest Bethlehem distributor. By doing so, you'll find it easy to get the rope you need, and get it fast!

BETHLEHEM STEEL COMPANY
BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation. Export
Distributor: Bethlehem Steel Export Corporation

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SLINGS, TOO



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NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

ALABAMA

ASHLAND—Gaye Mfg. Co. received bid of \$114,900 from H. B. Garrett for manufacturing plant, at L. Holman, Jr., Ozark, Ala., Archt.

BIRMINGHAM—Birmingham Food Terminal, Inc., Thos. N. Nelson, president, let contract to S. S. Jacobs Co., Jacksonville, Fla., at \$7,000,000 for Farmers' Market on Finley Ave.

BIRMINGHAM—Southeastern Joslyn Co. let contract to Campbell Lowry Lautermilch for \$150,000 warehouse, 222 Vanderbilt Road, Abener C. Hopkins, Jacksonville, Archt.

BIRMINGHAM—Southern Natural Gas Co., Watts Bldg., let contract to James Lymance for \$20,000 hangar at Municipal Airport.

GADSDEN—Republic Steel Corp., Cleveland, Ohio, plans major expansion program at Gadsden plant, L. A. White, president.

HAMILTON—Alabama Gas District let contract to F. R. Hoar & Son at \$82,975 for office building and service building, Greer Holmquist & Chambers, Archt.

KETONA—Ketona Chemical Corp. let contract to Robins Engr. Co., Birmingham, at \$62,859 for office building and service building.

MOBILE—International Paper Co., Erling Rils, Vice-Pres. & Genl. Mgr. of Southern Kraft Division, plans \$2,000,000 newsprint mill, located adjacent to company's paper and bag mill at Plateau, North of Mobile.

MONTGOMERY—Kershaw Mfg. Co. received bid of \$33,440 from Bear Bros. for addition to shop, J. Streeter Wiatt, Archt.

TALLADEGA—Wehadee Yarn Mills let contract to Batson-Cook Co., West Point, for addition and alterations to mill, Robert & Co. Assocs., Atlanta, Archts.

FLORIDA

DADE COUNTY—Leo Schor, 3610 N.W. 59th St., Miami, let contract to Merrit, Inc., 4016 Chase Ave., Miami Beach, for industrial building, 2447 N.W. 75th St., to cost \$42,539.

DADE COUNTY—Walter Weiss, 104 N.W. 20th St., Homestead, plans office and body shop on U.S. No. 1, N. of Homestead.

GAINESVILLE—Office of Clerk of Circuit Court, Alachua County Court House, received bids for Alachua County Health Center, Reynolds, Smith & Hills, Box 4817, Jacksonville, Archt.-Engr.

MIAMI—L. M. Anerson Dental Supply received bids for showroom and warehouse, Steward & Skinner, 223 S.E. First St., Archt.

MIAMI—Florida Power & Light Co. let contract to M. R. Harrison Constr. Corp., 630 N.W. 54th St., for transformer shop and new office, E. T. Reeder Assocs., 1777 Biscayne Blvd., Archts.

MIAMI BEACH—Radio Station WAHR, Alan H. Rosenon, let contract to Sparks Constr. Co., Inc., 2565 Ponce de Leon Blvd., Coral Gables, at \$18,000 for addition, Vernon D. Lamp, 2649 Coral Way, Miami, Archt.

MILTON—Escambia Bay Chemical Corp. let contract to Chemical Construction Corp., 525 W. 43rd St., New York, for \$28,000,000 chemical plant.

NO. MIAMI—Florida-Georgia Tractor Co. received bids for stock room and shop at 151st St. and W. Dixie Highway, Lester Avery, 1521 S.W. 1st St., Miami, Archt.

ORLANDO—Seaboard Airline Railroad Co. let contract to Fiske-Carter Constr. Co., Box 1251, Spartanburg, S. C., for new freight depot, W. Amelia near N. Westmoreland Drive.

PALATKA—Hudson Pulp & Paper Corp. let contract to Hiliyer & Loran, Inc., Jacksonville, for research and engineering building.

PANAMA CITY—Sunshine Grocery Co. received bids for building remodeling and addition, N. P. Cross, Panama City, Archt.

ST. PETERSBURG—Milton Roy Co., Philadelphia, Pa., maker of pumps and controlled flow systems, plans new plant and adjacent residences for workers.

GEORGIA

ATLANTA—Atlantic Steel Co. let contracts as follows for construction of new Merchant Bar & Rod Mill, first phase of a \$10,000,000 modernization and improvement program: Grading—Dalton Contr. Co., Box 3284, Sta. F, Atlanta.

Construction of Buildings—Rust Engineering Co., Birmingham, Ala., general engineer for construction of buildings and installation of new mill.

Mill Machinery—Morgan Constr. Co., Worcester, Mass.

Electrical Machinery, Equip. & Inst.—General Electric Co.
Reheating Furnace & 4 Overhead Cranes—Whiting Co., Harvey, Ill.

Work to start in May. Total amount involved in these contracts approximately \$8,500,000.

BAXLEY—Appling Industries, Inc., let contract to Ed L. Powers, Jessup, Ga., for plant building, estimated to cost \$103,000. Miller Western Wear will occupy building.

BLAKELY—Blakely Builders & Mfrs., Inc., let contract to United Builders, 609 Gordon Ave., Thomasville, for \$120,370 manufacturing plant, H. L. Holman, Jr., Ozark, Ala., Archt.

ELBERTON—Elberton Development, Inc., let contract to Herndon & Smith at \$65,076 for manufacturing plant, James M. Hunt, Elberton, Archt.

KENTUCKY

ASHLAND—Armco Steel Corp., Middletown, Ohio, plans \$15,000,000 expenditure on additions and alterations at plant in Ashland.

LOUISIANA

BATON ROUGE—Ethyl Corporation let contract to Perillat-Rickey Construction Co., Drawer 13128, 1530 S. Rendon St., at \$168,500 for development laboratory addition, Kuehne, Brooks & Barr, Archts.

BATON ROUGE—Ethyl Corp. let contract at \$46,411 to Sachse Electric Co., 2500 North

Warehouse Co.'s, Shrewsbury Plant on La-Barre Road; to cost between \$20,000 and \$30,000.

NEW ORLEANS—Robert Cummins, Archt., 126 Baronne St., let contract to Quality Constr. Co., Box 9062, Metairie, New Orleans, at \$60,568 for warehouse and office building in 7000 block Washington Ave., to be occupied by Armstrong Cork Co.

LAFAYETTE—Evans Electrical Supply Co., Inc., received bids for warehouse, sales office and display room on Scott Road, H. J. Lagroue, Jr., D. H. Castille Bldg., Archt.

NEW ORLEANS—Ideal Cement Co., Geo. Wiley, Chief Engineer, National Bldg., Denver 2 Colo., received bids for additional storage facilities at plant 5301 Burma Road.

NEW ORLEANS—Thomas J. Moran & Sons, 714 Girod St., let contract to C. B. Spencer Co., Inc., 2350 Rousseau St., at \$283,610 for warehouse and office building at Euphrosine & S. Broad Sts. Lawrence, Saunders & Calogne, 232 Humble Bldg., Archts.

NEW ORLEANS—New Orleans Public Belt Railroad plans new food processing plant and warehouse building on Pontchartrain Drive at Cunningham St., Jefferson Parish, for Charles Denery, Inc., 524 Magazine St. August Perez & Assocs., Audubon Bldg., Archts.

NEW ORLEANS—Andrew Louis Schneider, Pere Marquette Bldg., Archt., received bids for office and warehouse building on Leonidas St.

SHREVEPORT—Ralph O. Kiper, 619 Milam St., Archt., received bids for Delta-Desco office and warehouse building at 539 Aero Drive, to cost \$50,000.

MARYLAND

BALTIMORE—American Radiator & Standard Sanitary Corp., 5435 Holabird Ave., Balto. 24, received bids for new cooling shed and extension of enamel shop.

BALTIMORE—Baltimore Overall Cleaning Co., 78 S. Franklintown Road, let contract to Armiger Constr. Corp., 2127 Maryland Ave., Baltimore 18, at \$25,000 for building and office at 2555 W. Lexington St.

BALTIMORE—H. D. Dreyer Co., 1400-1406 Alliceanna St., let contract to Consolidated Engr. Co., 20 E. Franklin St., Balto. 2, at \$65,000 for manufacturing building, H. H. Moulton, 117 Oak Drive, Catonsville, Archt.

BALTIMORE—Gunther Brewing Co., 1211 S. Conkling St., Balto. 24, plans shipping and receiving building, S. Conkling, S. Toone, Baylis & Ellicott Sts., Harley, Edlington & Day, Archts.

BALTIMORE—Irish Potato Chip Co. let contract to Kirby & McGuire, Inc., 2518 Greenmount Ave., at \$25,000 for addition to warehouse, J. Eldridge Moxley, 12 E. 24th St., Archt.

BALTIMORE—Charles Neubert & Co., 114 E. York St., received bids for parking building, 320-324 Key Highway, to cost \$15,000, Richard F. Cook, Archt.

BALTIMORE—B. Von Paris & Sons Co., 400 S. Highland Ave., let contract to The E. Eyring & Sons Co., 800 S. Conkling St., Balto. 24, at \$10,000 for garage and office building, John Eyring, 810 Conkling St., Balto. 24, Archt.

BALTIMORE—Rukert Terminal Corp., Jackson's Wharf, 1400 Thames St., let contract to C & R Construction Co., 1024 Collington Ave., Balto. 5, at \$100,000 for terminal.

BALTIMORE—United Steel of America, 2800 Falls Road, received bid from Charles W. Williams & Assocs., 2210 Maryland Ave., Balto. 18, at \$225,000 for factory and office building on North Point Road.

BALTIMORE—Westinghouse Electric Corp. plans expansion of plant at Friendship In-

(Continued on next page)

New and Expanding Plants

Reported in March 1955

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First Three Months of 1955

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First Three Months of 1954

316

St., for mechanical and electric work in development laboratory addition.

CALCASIEU PARISH—Jos. A. Partridge, Jr., and Wm. H. Woodward, Assoc. Archts., Woosley Bldg., Lake Charles, La., will soon call for bids for construction of 6 phases of Pelican Park Race Track to be located 3 miles west of Vinton, La. Each phase will be bid separately, Phase 1—Site work; Phase 2—Administration Bldg.; Phase 3—Steel Grandstand; Phase 4—18 stable buildings; Phase 5—Secretaries' office, restaurant, drivers' room, caretakers' quarters, tote board; Phase 6—Club House; also, not placed in any phase, are outside lighting, sewerage disposal system, finishing landscaping.

GLENMORE—Forest Hill Telephone Co. let contract to David B. Miller & Co., Inc., P.O. Box 425, Lake Charles, at \$26,007 for building.

LAFAYETTE—Braun Welding Supply received bid of \$22,448 from P. C. Gilmore, Box 911, for office and warehouse, Robert L. Stephan, 901 Lee Ave., Archt.

LAFAYETTE—Massart Tire & Supply Co., 211 W. Third St., plans addition to building, D. J. O'Rourke & Eugenia Morse, Assocs., 314 S. Buchanan St., Archts.

NEW ORLEANS—Anderson, Clayton & Co., Cotton Exchange Bldg., let contract to Perillat-Rickey Constr. Co., Inc., P.O. Drawer 13128, for Classing building for Gulf Atlantic

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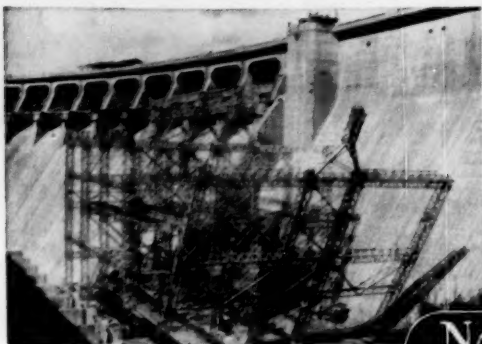
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NASHVILLE BRIDGE COMPANY
NASHVILLE, TENN. — BESSEMER, ALA.

NEW AND EXPANDING PLANTS

(Continued from page 15)

INTERNATIONAL AIRPORT, including combined manufacturing plant, engineering and office building, for production of military electronic equipment.

MIDDLE RIVER—Glenn L. Martin Co. received bids for construction of I.B.M. computer facilities, "C" Building.

PIKEVILLE—C & P Telephone Co., Lexington Bldg., received bids for addition to Pikeville dial center, 400 Reisterstown Road. Taylor & Fisher, 1012 N. Calvert St., Archt.

MISSISSIPPI

BYHALIA—Board of Supervisors of Marshall County, Holly Springs, let contract to Wooten Constr. Co., 609 Wallace Bldg., Little Rock, Ark., at \$93,600 for factory building, for soil or clay manufacturing type industry; to be located N.W. of Byhalia on US Highway 78.

CLARKSDALE—American Hardware Corp., New Britain, Conn., to receive bids for industrial plant building to cost \$1,150,000. R. W. Naef, Jackson, Miss., Archt.

CORINTH—Rudolph Wurflitzer Piano Co., plans piano plant, John L. Turner & Assocs., 1090 Milner Bldg., Jackson, Miss., Archt.

DECATUR—Citizens of Newton County's Beat One, approved \$175,000 bond issue for shirt factory for Imperial Shirt Co. of New York. Robt. A. Clopton, 408 Vise Clinic Bldg., Meridian, Miss., Archt.

HOLLY SPRINGS—Costed Abrasive Co. received bid from Simpson Lumber Co. at \$67,900 for superstructure for additional building.

LAUREL—Norris Dispensers, Inc., J. Y. Downing, Jr., General Mgr., East 13th St., received bids for addition to plant, estimated to cost \$150,000. Robt. A. Clopton, Box 149, Meridian, Miss., Archt.

MERIDIAN—Kroehler Mfg. Co., Charlotte, N. C., plans \$2,000,000 furniture manufacturing plant.

NATCHEZ—Standard Ore & Alloy Corp., New York, plans \$20,000,000 chemical plant for production of acetylene and ammonia.

OXFORD—Lafayette Co. Board of Supervisors let contract to McDaniel Bros. Constr. Co., 323½ S. Main St., Jonesboro, Ark., at \$486,417 for new office and factory building for Chambers Corp., Shelbyville, Ind.

SUMMIT—Board of Supervisors of Pike County, Magnolia, Miss., received bids for tile and steel frame factory and office building for Supervisor's District No. 4 of Pike Co., \$250,000 bond issue voted. Curtis & Davis, 522 Perdido St., New Orleans, La., Archts.-Engrs.

MISSOURI

KANSAS CITY—Hoffman Electronics Corp., Kansas City, plans expansion of plant facilities.

KANSAS CITY—Kansas City Power & Light Co. plans Operations Sub-Center, to cost \$500,000, at 86th St. & Prospect Ave.

ST. JOSEPH—Quaker Oats Co., Chicago, plans expansion of grain and flour storage facilities to cost over \$2,000,000.

ST. LOUIS—Brown Shoe Co., 8300 Maryland Ave., Clayton, Mo., let contract to Gamble Constr. Co., 804 Pine St., for warehouse at Gustine & Bingham Sts.

ST. LOUIS—Siegel-Robert Co., 4193 Manchester Ave., let contract to Karl Flach, 638 Florence Ave., Webster Groves, for plating plant addition, Frank McGuire, 2816 Sutton Ave., Maplewood, Archt.

NORTH CAROLINA

CHARLOTTE—Celanese Corp. of America, Harold Blanche, president, plan fiber research and development center on 114-acre site.

CHARLOTTE—McLean Trucking Co., Winston-Salem, let contract to Wagoner Constr. Co., Salisbury, N. C., for freight terminal and warehouse.

CHARLOTTE—Pelton & Crame Mfg. Co. let contract to J. A. Jones Construction Co. at \$500,000 for building. C. W. Connelly & Assocs., Archts.

CHINA GROVE-LANDIS—Telephone Co. of Concord, N. C., let contract to Graham Constr. Co., Kannapolis, for building. J. N. Pease & Co., Inc., Charlotte, N. C., Archt.-Engrs.

FAYETTEVILLE—American Bakeries received bids for additions and alterations to plant. Stevens & Wilkinson, 157 Luckie St., N.W., Atlanta, Ga., Archts.

HIGH POINT—The Schoonbeck Co., Grand Rapids, Mich., let contract to E. E. Younts Co. for furniture manufacturing plant on Ward St., to cost about \$120,000.

ROANOKE RAPIDS—Virginia Electric & Power Co. let contract to M. E. Howard Construction Co., Richmond, for headquarters building and related yard work. I. J. Altien, Richmond, Archt.

SWANNANOA—Draper Corp. received bids for new shuttle plant, Lockwood-Greene Engrs., Inc., Spartanburg, S. C., Archts.-Engrs.

WADESBORO—North Carolina Telephone Co., Matthews, N. C., received bids for building. Higgins & Ferebee, Charlotte, N. C., Archts.

SOUTH CAROLINA

GRANITEVILLE—Graniteville Company plans expansion of its Hickman Mill.

GEORGETOWN—International Paper Co., Georgetown, let contract to Tidewater Construction Corp., Norfolk, Va., at \$161,997 for pump house and pipe line.

TENNESSEE

CHATTANOOGA—Chattanooga Glass Co. plans warehouse, Selmon T. Franklin, Archt.

CHATTANOOGA—Great Southern Trucking Co. plans modern terminal on 6-acre tract at N.E. corner of South Market St. & Shipp Ave., including office and warehouse; to cost approx. \$100,000.

CHATTANOOGA—Stone Fort Land Co. plans development of 22-acre tract for light industry and warehousing.

JOHNSONVILLE—DuPont Co., Wilmington, Del., plans \$40,000,000 titanium production plant.

MCMINNVILLE—Tenn-Rock Hosiery Co., Lynchwood Smith, Exec. Vice-president, let contract to J. D. Womack Lumber Co. for \$60,000 building.

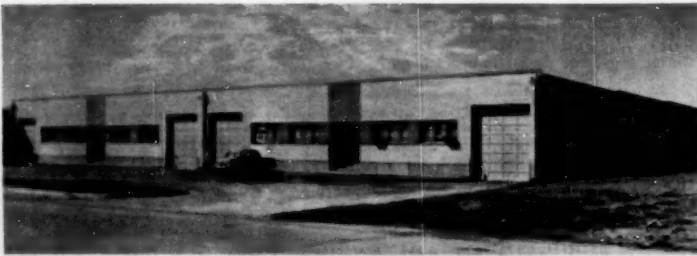
NEW BERN—Board of Aldermen received bids for natural gas distribution system, and relocated transmission facilities.

SHELBY CO.—J. Seldon Allen, et al., received bids for distribution center. Walk C. Jones, Jr., 1215 Poplar St., Memphis, Archt.

TEXAS

AUSTIN—Austin Concrete Works, 2726 E. Fifth St., let contract to W. D. Anderson Co., 1601 N. Congress Ave., at \$52,964 for plant building and office building on Airport Blvd. (Continued on page 60)

TRINITY INDUSTRIAL DISTRICT



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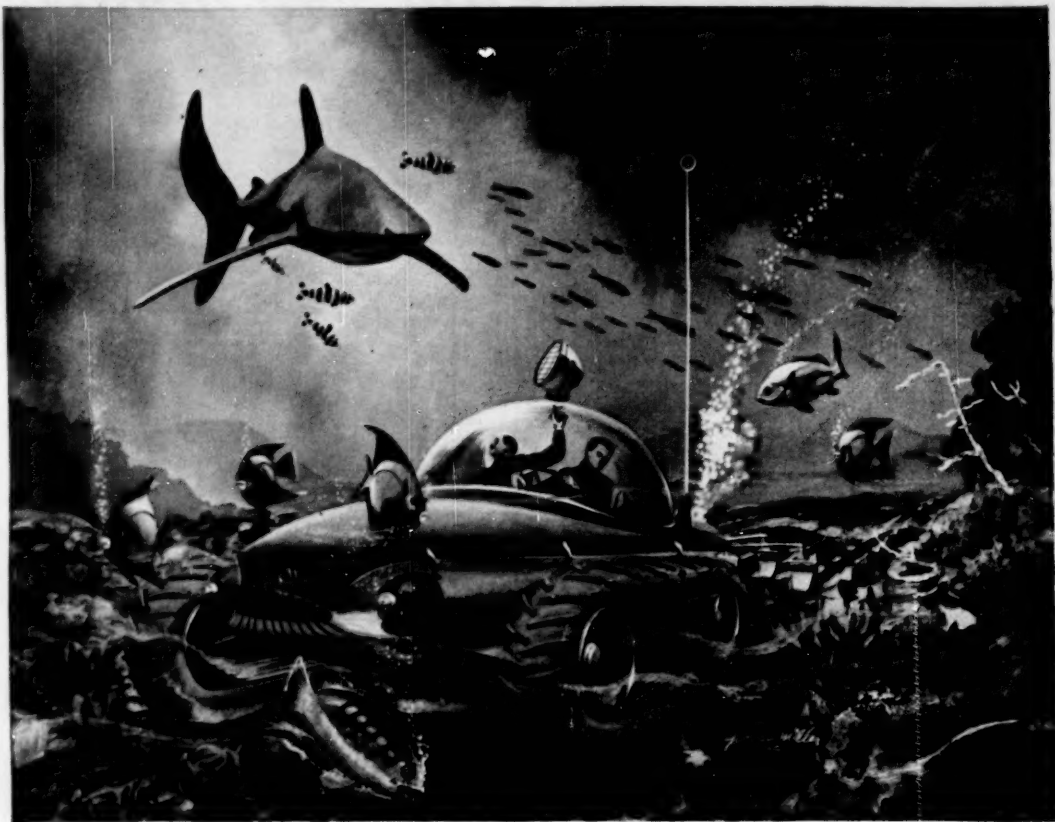
Yes, it is true what we say about Dixie. And the years ahead hold the bright promise of still greater progress and growth. That's why we'll go right on saying, **"Look Ahead—Look South!"** All America will listen. And all in the South will benefit.

Harry A. DeBette
President



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LITTLE GRAINS OF SAND

*"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."*

"Fair" to Whom? The Supreme Court of Arkansas went directly to the main issue when it ruled the other day that the state's "fair trade" law was unconstitutional. That issue, upon which fair traders have depended to enforce state-wide price-fixing, was whether a contract between a wholesaler and one retailer can bind all other retailers to the same price.

The Arkansas high court unanimously said "no." It reasoned that a contract is a contract and if it is signed between parties to an agreement—even to fix prices—it is valid. But it ruled that where there was no contract there was no right of compulsion to force non-signers to observe set prices.

The Arkansas case arose when Union Carbide and Carbon Corporation asked an injunction to prevent a retailer from selling one of its products for \$2.97 a gallon when the set price was \$3.75 a gallon.

Doubtless the United States Supreme Court eventually will find this case on its docket. We hope the learned justices will see the Constitutional point of due process as clearly.

A philosophy of trading that would force an unwilling man to maintain high prices for certain goods is not only unfair to him and his customers, it is also the sort of compulsion one should expect only in a police state. In outlawing that compulsion, the judges in Arkansas and Nebraska have put fairness back in trading.

Sticking Your Neck Out.

What makes good sense to us was recently expounded by the president of one of the country's largest bakeries.

"Too many people in business," the man said, "take too many pains to see to it that they don't make mistakes. This striving for perfection too often results in keeping the neck in when maybe it should be sticking out."

The bakery president also told his audience that one of the best ways to kill an idea is by calling a conference. It doesn't take long to kick someone's brainchild

out of shape after a committee of five or so has had a chance to work it over. Ironically enough, after the idea has been dropped someone else usually picks it up and makes it go.

Political Trickery. One of the oldest political maneuvers in Congressional politics is the scheme for having one house pass a bill that is unwise but has some political appeal and then having the other house kill it. This gets the sponsoring party credit for "being interested in the people" without its having to bear the blame for reckless legislating.

But it's a trick that sometimes slips. Sometimes a very demagogic bill builds up so much political steam that it whirls through the second house as well as the first, and then the maneuverers find themselves responsible for a bill they never intended to get enacted.

The Democrats' bill to give \$20 to nearly every man and infant was just such a bill. Its maneuverers in the House, led by that old tactician Speaker Rayburn,

were perfectly well aware of what this proposal would do to the Government's house-keeping account if passed; and they hardly bothered to pretend that this would be the way to reduce taxes if tax reduction were now feasible.

Parasitic. The revolt of the French against paying taxes began under Premier Mendes-France, who insisted that the French storekeeper must pay his honest share of taxes, and it has continued because Premier

Faure insists on the same ridiculous procedure. Both should have known better: a wise old Frenchman once stated the case very well: Clemenceau said that "Frenchmen will die for their country, but they will not pay taxes."

Many Americans will have very mixed feelings about all this. They share the French dislike for high taxes and nobody here will blame the taxpayers for thinking they are being fleeced in France.

(Continued on page 20)

There's really only one thing wrong
with the younger generation . . . a
lot of us don't belong to it anymore.



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THE BALTIMORE AND OHIO RAILROAD CO.

128th Annual Report—Year 1954

Income:	Year 1954	Comparison With 1953	
		(+) Increase	(-) Decrease
From transportation of freight, passengers, mail, express, etc.	\$378,088,687	—	\$82,760,299
From other sources—interest, dividends, rents, etc.	10,509,402	+	122,835
Total Income	\$388,598,089	—	\$82,637,464
Expenditures:			
Payrolls, supplies, services, taxes	\$334,189,556	—	\$66,954,393
Interest, rents and services	39,879,744	—	2,178,927
Total Expenditures	\$374,069,300	—	\$69,133,320
Net Income:			
For improvements, sinking funds and other purposes	\$ 14,528,789	—	\$13,504,144

The full dividend of \$4.00 per share was paid on the preferred stock. A dividend of \$1.00 per share was paid on the common stock.

In 1954 long term debt in principal amount of \$44,286,535 was paid off. During the period December 31, 1941 to December 31, 1954, long term debt, other than equipment obligations, was reduced \$204,904,231, with an annual saving in interest charges of \$9,261,515. Equipment obligations increased \$57,238,974, which added \$1,668,305 to annual interest charges. The net reduction in long term debt was \$147,665,257, and the saving in annual interest \$7,593,210.

H. E. SIMPSON, President

LITTLE GRAINS OF SAND

(Continued from page 19)

But we dare say these same Americans dislike even more being fleeced for France because some people there refuse to pay their just taxes. And that, after all, is the real effect of the F.O.A. gifts and grants, the military aid and the other schemes our Government is engaged in, not only in France but in a score or more other lands.

Research for Railroads. The leak, whether accidental or planned, of the President's Cabinet Report to a financial daily makes it certain that the President will send some sort of a message to the Hill regarding transportation before the end of this Congressional session.

The railroad industry was the only basic transportation agency for which no federal money was spent directly on technical research, the report stated, while for many years the federal government through the Bureau of Public Roads and the National Advisory Committee for Aeronautics had devoted large sums to research. While these developments were justified primarily for defense, all major findings were of a direct value to commercial aviation, it said. Government research expenditures on railroad problems could be as fully justified as those for other forms of transportation. Research of this type could embrace such problems as improved equipment, road bed, communications and fuel. For example, the report stated, in the interest of national security as well as the coal industry, it would appear desirable to perfect a coal-fired gas turbine locomotive. Another severe shortage of petroleum such as occurred during World War II might make it difficult to maintain the highly dieselized railroad at peak operations.

Welfare Gone Crazy. The Lumaghi Coal Company, at Collinsville, Ill., recently totaled its books on its 1954 business and set down the results in a statement to its employees. Since it is one of the oldest and largest businesses in the town, it also published the statement in the Collinsville *Herald* for the information of its neighbors.

The company has made money in recent years, and in the last decade spent twice as much keeping its mines efficient as it paid its owners in dividends. This is reflected in the fact that last year it extracted 11.02 tons of coal for every manshift worked, an excellent record even in the highly mechanized American coal industry.

However, 1954 was a poor year in the coal business. The company lost \$40,000 on about \$180,000 in sales because of lower prices and a poor market. Its 218 miners got only 147 days' work during the year.

Our attention was attracted to what happened to the wage fund available for these miners. The company charged off just short of a million dollars—\$985,906—to wage costs for the men who actually produced its coal. But it credited them with only

LITTLE GRAINS OF SAND

\$721,172 in wages, and before that went into the pay envelopes income tax withholdings, the amount of which is not listed in the statement, took a further bite.

The company paid \$34,307 in social security taxes and withheld approximately the same amount from the miners' wages. In addition it paid \$196,120 into the welfare and retirement fund of the Progressive Mine Workers Union, to which its employees belong. The Progressives are the Illinois rebels who seceded from John L. Lewis' United Mine Workers two decades ago and their welfare fund is supported by the same tonnage tax collected from UMW mines.

These sums totaled \$264,734, and all but \$34,307, or thereabouts, was paid by the employer, not the employees. That, however, is immaterial. What is material is that the money all came out of the miners' wage fund, the amount of money that could be paid out to get the coal out of the ground and still leave some hope of profit in a normal year.

These boxcar figures mean more when they are divided by 218, the number of miners who worked for the company last year. What we get then is the fact that the average Lumaghi miner got \$3,308 last year, out of which he had to pay his income taxes, while he and his boss were required by law and union agreements to set aside \$1,218 for his old age or for the care of his family if he is killed in the mine.

Can anyone imagine a married man with a family—and many miners have big ones—voluntarily setting aside more than a quarter of an annual salary of \$4,526 for insurance and annuities? That's what the Collinsville miners did, though not voluntarily, last year.

So far as they are concerned, the welfare state is already here.

The Good Old Days. This writer submits that this whole nation is being thoroughly brainwashed by fear.

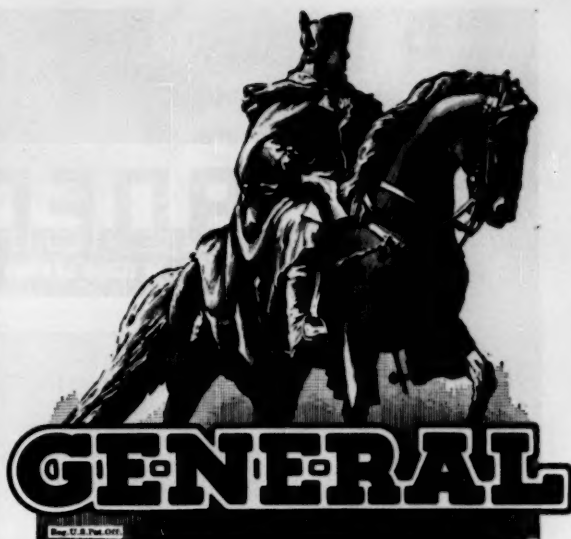
First, we are told we have unprecedented prosperity. But, we are told, we are in deadly peril and must never stop paying billions to foreign politicians for "protection." Next, we must pay more billions to our own Federal Government for "protection" (welfare, schools, roads, etc.).

If you are not scared already, then go to the nearest newsstand. On the covers of magazines we read, in effect, the hydrogen bomb will kill us; cancer will kill us; smoking will kill us; eating will kill us; our children are potential killers and our emotions have a "breaking point."

This writer remembers the bad old days when no one was scared. We hummed the lovely tunes of Herbert and Lehar. We bought books for the sheer delight of reading a wonderful yarn. We were content with what we had and never dreamed of using our vote to get what somebody else had. We loved Columbia the Gem of the Ocean because to us that meant a free country and not the gigantic, voracious Government which now scares us to death and then taxes us blind for "protection."

MABEL G. BLISS

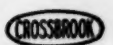
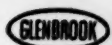
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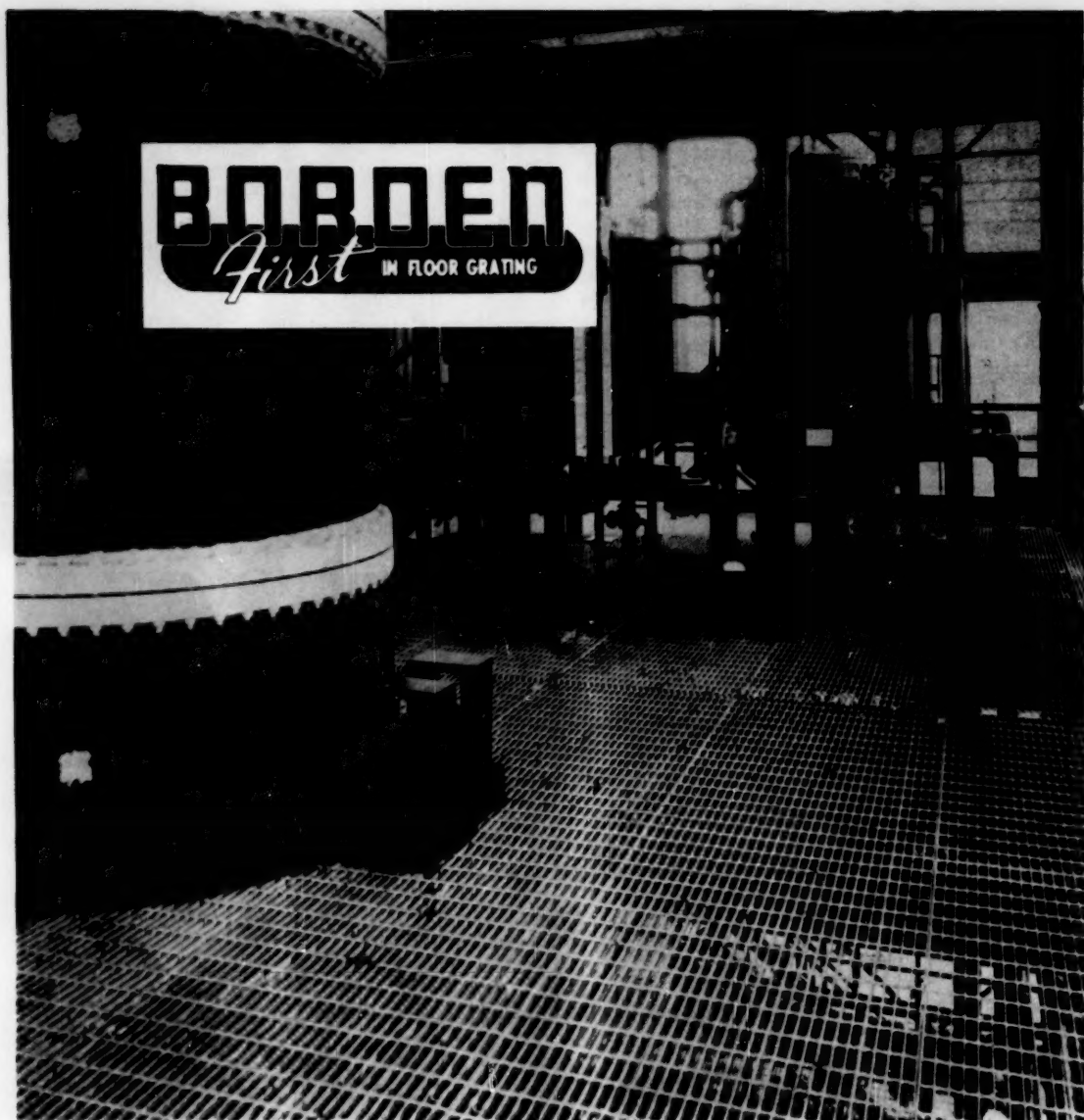
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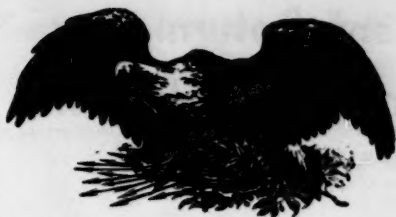
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CITY AND STATE



"What Enriches the South Enriches the Nation"

Guaranteed Stagnation

Unfortunately, the vast majority of talk about a guaranteed annual wage has revolved around one specific proposal—the UAW-CIO proposition. Too much attention and emphasis has been put on the specific provisions of this proposal and not enough attention and thought has been devoted to the general question of a guaranteed annual wage, with the net result that vociferous “stands” have been taken on the merits of a solution before the problem—which is not limited to one industry—is thoroughly understood.

No one will argue that an assurance of steady year-round employment is a desirable social good for the benefit of the individual as well as the economic community as a whole. Inestimable are the economic benefits that accrue when men have not only jobs and income, but assurance that the jobs and income will continue. Of far greater importance is the fact that men in such a situation possess a dignity that makes them better men.

There is no question about the desirability of steady employment; it stimulates our economy, and this in turn results in many good things, tangible and intangible, for everyone, as our standard of living rises. These things lead to the development and maintenance of a feeling of pride through accomplishment, without which man cannot grow in self respect, nor long be satisfied.

The aim of any such plan should be good jobs at good steady pay. The UAW-CIO plan does not guarantee these things, or even aim for them. It does not ask for more jobs or more pay, or that a man's earnings be paid in equal portions throughout the year. In essence it says that men should be paid, even if they have not worked. It is simply another negative approach to get something for nothing.

But the union says this will stabilize production. Because of the high cost of this pay-for-no-work plan, the economy will be forced to stabilize their employment, which will result in stabilized production.

To stabilize is to freeze the situation in a status-quo so that it will be favorable to the stabilizers. Stable employment does not increase.

One specific proposal of the union is that if the company employs a worker who has acquired minimum

seniority rights it must undertake to pay him one week's lay-off pay for each two weeks worked. There might be work for only ten days, yet he would still have to be paid for not working the other five.

Were the company to employ a worker of two years' seniority for the first week in January, it thereby would guarantee to pay him for the succeeding fifty-one weeks.

Clearly such a system would give pause to management as to how many workers it employs when it is faced with such a liability. Diabolically, it puts a premium on management's being restrictionist, that it hold down its production, its jobs and its pay.

This is hardly the method that enabled the auto industry to become the giant of American enterprise, and the auto worker to be among the highest paid in the world.

Some favors would be gained by the privileged few under this plan, or the few who might later acquire a vested interest. But what about those who would not get any work at all, or those who might lose their jobs because of the lower level of auto production?

This UAW proposal confuses the problems of intermittent employment with the tragedy of unemployment. Over a year's time the high overtime pay of the industry averaged against the idle periods provides well paying work for the year. Witness the fact that many men constantly seek auto jobs, because they think them satisfying and rewarding.

If the automobile industry becomes chained by restrictionist policies forced upon it by the UAW-CIO guaranteed annual wage plan, or anything like it, those whose jobs and incomes are associated with the automobile industry will suffer along with the automobile workers, to say nothing of those for whom there would be no jobs.

The standard of living in the United States is much higher than that of the rest of the world today because of the free and dynamic character of our economy.

The plan proposed stands in direct opposition to the traditional economic policies that have achieved for American wage earners the highest annual wage in the world—be it guaranteed or not.

Rate of Investment Return Makes Heavy Impact on Income

by Caldwell R. Walker

Editor, Blue Book of Southern Progress

CAPITAL investment results in community assets that usually possess a quality of permanence.

As such, investment in Capital Goods is to be considered a valuable guarantee of continuous community income.

Along with this general truth goes the corollary that high per capita investment in Capital Goods inevitably results in high per capita income.

Evidence supporting both fact and corollary was set forth in the January issue of MANUFACTURERS RECORD under the title "Income Depends Upon Investment."

Aside from the generality thus expressed, there are, however, other qualifying considerations that are not only of interest but also of value in determining a community's best approach to optimum prosperity.

Among such considerations is the matter of return on investment.

The United States as a whole, with a total capital investment of \$392 billion and a total income therefrom of \$237 billion, shows a return of 60.5 per cent per annum.

By the same manner of calculation the 16 states of the Blue Book South show 55.8 per cent return, with capital investment of \$110 billion and income therefrom of \$61 billion.

What Constitutes Capital?

At this point it will be helpful to clarify briefly the elements involved in the foregoing equations.

Capital investment is subject to a wide range of interpretation. The term can, and usually does, imply the inclusion of a number of intangibles such as accounts, reserves and undivided surplus. Of late, it has been used to include such items as owner-occupied residences and even some items of personal use.

Capital Goods, however, as a matter of terminology, are generally restricted to the Plant necessary to produce, and the Inventories necessary to continue the productive process.

It is this latter interpretation that is used for the present study.

Also, the term Income has come to be varied by a number of interpretations, and for the purpose at hand is assumed to be solely the proceeds from private industry in the form of payrolls and profits before the deduction of income taxes.

Income of this definition accurately sets forth the earnings accruing from business of all types but does not correspond with "Income Payments" which include Government payrolls and transfers nor with "Disposable Income" which does not include the undistributed earnings of industry.

Leadership Varies

On an adjacent page will be found a detailed listing of Capital Goods values, by states and by industries, but at this point it is only necessary for the purpose at hand to set forth the rankings of the various states and regions with respect to certain phases of Capital Goods investment.

Capital Goods Rank

State Rank	Capital Goods Value	Per Capita Investment	Return on Capital Investment
1	N. Y.	Wyo.	Conn.
2	Cal.	Neb.	Mich.
3	Ill.	Kan.	Del.
4	Pa.	la.	R. I.
5	Tex.	Mont.	Mass.
6	Ohio	S. D.	N. J.
7	Mich.	N. D.	N. H.
8	N. J.	Ida.	Ohio
9	Ind.	Tex.	N. Y.
10	Mo.	Ill.	Md.
11	la.	Minn.	Me.
12	Mass.	Nev.	Fla.
13	Minn.	Colo.	Pa.
14	Wisc.	Ind.	Wisc.
15	Kan.	Utah	D. C.
16	N. C.	Del.	Ga.
17	La.	Okla.	S. C.
18	Va.	Va.	Tenn.
19	Okla.	Ore.	Ill.
20	Tenn.	N. M.	Ind.
21	Ga.	Me.	Vt.
22	Wash.	N. Y.	N. C.
23	Md.	Ohio	Cal.
24	Ky.	Cal.	Wash.
25	Neb.	Wash.	Mo.
26	Fla.	Pa.	Ala.
27	Ala.	Wisc.	Va.
28	Conn.	D. C.	Ky.
29	Ore.	La.	Ariz.
30	W. Va.	N. J.	W. Va.
31	Colo.	Mich.	Nev.
32	S. C.	Conn.	La.
33	Ark.	W. Va.	Ore.
34	Miss.	Md.	Miss.
35	Mont.	Vt.	Minn.
36	S. D.	Mass.	Ark.
37	Utah	Ariz.	Utah
38	N. D.	Ky.	Colo.
39	Ida.	R. I.	Tex.
40	D. C.	Tenn.	Okla.
41	N. M.	N. C.	N. M.
42	Ariz.	N. H.	Kan.
43	Me.	Me.	Mont.
44	R. I.	Ark.	Ida.
45	Wyo.	Ga.	la.
46	Del.	Ala.	Neb.
47	N. H.	S. C.	N. D.
48	Vt.	Fla.	Wyo.
49	Nev.	Miss.	S. D.

Regional Rank

1	EN.C.	W.N.C.	N. E.
2	M. A.	Moun.	M. A.
3	W.N.C.	W.S.C.	EN.C.
4	W.S.C.	EN.C.	S. A.
5	Pac.	Pac.	Pac.
6	S. A.	M. A.	E.S.C.
7	N. E.	N. E.	W.S.C.
8	E.S.C.	S. A.	Moun.
9	Moun.	E.S.C.	W.N.C.

From the foregoing table it is readily apparent that different forms of leadership are held by different states.

The article in the January RECORD, previously mentioned, dealt with the first two forms, those held by New York and Wyoming.

Respecting the third form, that involving leadership in "return", a comparison of Connecticut at the head of the list and South Dakota at the bottom makes available some interesting data.

It should be stated at this point, however, that South Dakota, while rating low in this particular phase of investment data is by no means a trailer in most other respects.

In total value of Capital Goods, for instance, this state stands no lower than 36th and in per capita investment ranks sixth in the Nation.

The forementioned comparison follows:

Capital Return

Data	Conn.	S. D.
Capital Goods Value (\$mil.)		
Farming	\$ 312	\$1,385
Manufacturing	2,180	82
Trade	796	256
Other Industry	1,867	339
Total Industry	5,155	2,062
Income (\$mil.)		
Farming	70	237
Manufacturing	2,247	53
Trade	882	227
Other Industry	918	205
Total Industry	4,117	722
Return (%)		
Farming	22.4	17.1
Manufacturing	112.0	64.6
Trade	111.0	88.7
Other Industry	49.2	60.4
Total Industry	79.9	35.1
Per Capita Income (\$)		
	1,863	1,095

Questions Intrude

There are some questions arising from the foregoing data that answer themselves. There are others that are not so obvious.

It is easy to see why Connecticut would show a better return on Manufacturing Plant and Inventory than that shown by South Dakota, since the latter state's manufacturing industry con-

(Continued on page 52)

Investment (Plant and Inventories) 1954—\$ Million

	Farming	Mining	Con- struction	Mfg.	Utility	Finance	Wholesale	Retail	Service	Total
Maine	\$ 231	\$ 4	\$ 20	\$ 523	\$ 328	\$ 158	\$ 53	\$ 200	\$ 52	\$ 1,569
New Hampshire	120	2	10	303	188	115	30	125	40	933
Vermont	197	15	6	158	148	70	15	93	18	720
Massachusetts	304	11	83	3,156	2,052	1,981	685	1,388	410	10,070
Rhode Island	44	2	22	667	282	251	75	208	58	1,609
Connecticut	312	5	63	2,180	724	907	143	653	168	5,155
NEW ENGLAND	1,208	39	204	6,987	3,722	3,482	1,001	2,667	746	20,056
 New York	1,481	113	332	9,434	8,956	9,113	4,733	3,918	2,258	40,338
New Jersey	487	31	141	5,543	2,714	1,354	405	1,335	476	12,486
Pennsylvania	1,520	823	231	11,049	6,140	2,852	1,293	2,448	902	27,258
MIDDLE ATLANTIC	3,488	967	704	26,026	17,810	13,319	6,431	7,701	3,636	80,082
 Ohio	2,906	153	223	9,475	4,128	2,005	1,268	2,235	755	23,148
Indiana	2,757	96	79	4,781	1,872	960	405	1,125	250	12,325
Illinois	5,538	332	232	8,317	5,404	3,557	2,030	2,433	1,139	28,982
Michigan	1,706	175	148	7,673	2,708	1,427	945	1,748	454	16,984
Wisconsin	2,060	41	75	2,694	1,378	794	330	935	225	8,532
EAST N. CENTRAL	14,967	797	757	32,940	15,490	8,743	4,978	8,476	2,823	89,971
 Minnesota	2,821	353	62	1,519	1,596	844	523	755	194	8,667
Iowa	5,601	24	50	1,190	1,036	592	410	645	178	9,726
Missouri	2,248	82	87	2,142	2,326	1,309	820	1,020	357	10,391
North Dakota	1,178	27	11	35	244	99	105	168	23	1,890
South Dakota	1,385	23	11	82	176	103	88	168	26	2,062
Nebraska	2,783	8	30	400	772	407	255	383	102	5,140
Kansas	3,253	337	48	1,389	1,278	406	253	500	138	7,602
WEST N. CENTRAL	19,269	854	299	6,757	7,428	3,760	2,454	3,639	1,018	45,478
 Delaware	93	1	17	388	222	127	43	105	28	1,024
Maryland	513	15	82	1,624	1,278	780	270	643	175	5,380
District of Columbia			31	63	582	526	163	400	132	1,897
Virginia	1,276	96	86	1,535	1,498	743	250	715	185	6,384
West Virginia	476	690	25	1,005	926	245	113	345	91	3,916
North Carolina	1,872	20	90	2,167	1,254	566	380	730	200	7,279
South Carolina	787	10	77	1,240	492	284	120	418	91	3,519
Georgia	1,058	27	67	1,534	1,280	678	318	668	210	5,840
Florida	880	63	117	460	1,296	868	303	850	229	5,066
SOUTH ATLANTIC	6,955	922	592	10,016	8,828	4,817	1,960	4,874	1,341	40,305
 Kentucky	1,571	335	68	1,017	1,042	379	258	558	143	5,371
Tennessee	1,425	49	77	1,530	1,072	577	415	648	197	5,990
Alabama	978	107	53	1,577	938	473	190	510	133	4,959
Mississippi	1,111	106	24	425	454	189	108	303	72	2,792
EAST S. CENTRAL	5,085	597	222	4,549	3,506	1,618	971	2,019	545	19,112
 Arkansas	1,105	90	24	457	546	197	95	325	72	2,911
Louisiana	871	676	85	2,022	1,424	466	228	545	142	6,459
Oklahoma	1,855	507	46	1,100	892	419	195	488	140	5,642
Texas	6,721	2,772	248	6,301	4,092	2,143	973	2,200	652	26,102
WEST S. CENTRAL	10,552	4,045	403	9,880	6,954	3,225	1,491	3,558	1,006	41,114
 Montana	971	123	14	270	408	111	65	165	37	2,164
Idaho	906	66	14	165	298	92	48	158	36	1,783
Wyoming	419	200	7	305	276	46	20	85	26	1,384
Colorado	1,193	144	36	515	796	378	180	365	144	3,751
New Mexico	633	235	20	120	352	112	38	165	36	1,711
Arizona	489	189	29	180	372	157	67	183	39	1,705
Utah	463	212	17	420	404	165	82	173	64	2,000
Nevada	112	54	15	88	162	41	10	65	24	571
MOUNTAIN	5,186	1,223	152	2,063	3,068	1,102	510	1,359	406	15,069
 Washington	1,448	25	65	1,382	1,144	622	303	633	203	5,825
Oregon	1,194	12	32	899	838	378	227	430	164	4,174
California	5,558	1,001	366	7,935	6,054	3,840	1,518	3,108	1,310	30,690
PACIFIC	8,200	1,038	463	10,216	8,036	4,840	2,048	4,171	1,677	40,689
UNITED STATES	74,910	10,482	3,796	109,434	74,842	44,906	21,844	38,464	13,198	391,876

Stock Market Resumes Pattern After Fulbright Hearings

Attention called to the need for wider economic education and a broadened base for common stock ownership.

By Robert S. Byfield
Financial Editor

Senator Fulbright's seminar on Wall Street and the stock market has now ceased to be a factor in influencing the course of quotations for common stocks. However, the forces which were responsible for the great bull market of the last few years are still in existence. The level of the market is now such that there are few real bargains available.

We were pleased to note that many of the witnesses at the hearings referred to the influences which we set forth in this column in the February issue of *THE MANUFACTURERS RECORD*. It was disappointing, however, that there appeared to be under-estimation of the effect of the Capital Gains Tax. Considerable testimony was given on this subject which advanced the thesis that if this tax were repealed and holders of common stocks were therefore induced to liquidate they would merely reinvest the proceeds in other common stocks. The result would be that the over-all level of common stock prices would not thereby be affected.

This reasoning ignores some of the investment facts of life because, were there no Capital Gains Tax to pay, many investors would switch common stocks into Government bonds in order to protect themselves against a possible stock market decline. Much more tempting from some angles would be a switch into municipal bonds of which there are many issues of quite respectable quality yielding between 2½% and 3%. These, as is well known, provide a considerably higher return to the investor than do blue chip and growth common stock issues, the dividend return from which is fully taxable.

Almost forgotten in the press reports of the hearings was the extreme interest and considerable hostility displayed by Senators Fulbright and Morse not only to the institutional advertising campaign of the New York Stock Exchange but

also to its Monthly Investment Plan, both calculated to broaden the base of common stock ownership in the United States. We have long felt that programs such as these are necessary and should merit the fullest support instead of antagonism on the part of Washington. Our rising standard of living is dependent upon a high level of productivity. Mass production is impossible without mass investment, and mass investment cannot take place without a much wider dissemination of economic education than has existed in this country. We firmly believe that we will lose our socio-economic system, which might well be called a Peoples' Capitalism, unless we understand how it works.

The need for wider economic education has been recognized in growing degree by widely diversified groups. A few years ago the Brookings Institution, assisted by a grant from the Alfred P. Sloan Foundation, surveyed the status of economic education in the United States, and the results were both interesting and constructive. It is our own deep conviction that the great colleges and universities have not been as active or as helpful in this field as might have been expected. The initiative seems to be in the hands of some of the more alert large business corporations, together with certain voluntary groups and foundations.

Recently it has been estimated that close to 25 per cent of the corporations whose shares are listed on the New York Stock Exchange have developed, in one form or another, employee educational programs on the subject of economics and the functioning of the American business system. There are signs that this movement is spreading, and it has been encouraged by the great business associations such as the Chamber of Commerce of the United States and the National Association of Manufacturers.

A number of corporations have pioneered in this direction, among them du Pont, U. S. Steel, Inland Steel and Borg Warner. The work of some of the non-profit specialized groups also stands out, particularly that of the American Economic Foundation and the Foundation for Economic Education. The work of some regional organizations is also noteworthy, particularly that of Americans for the Competitive Enterprise System, organized in 1950 and confining its operations to Southeastern Pennsylvania.

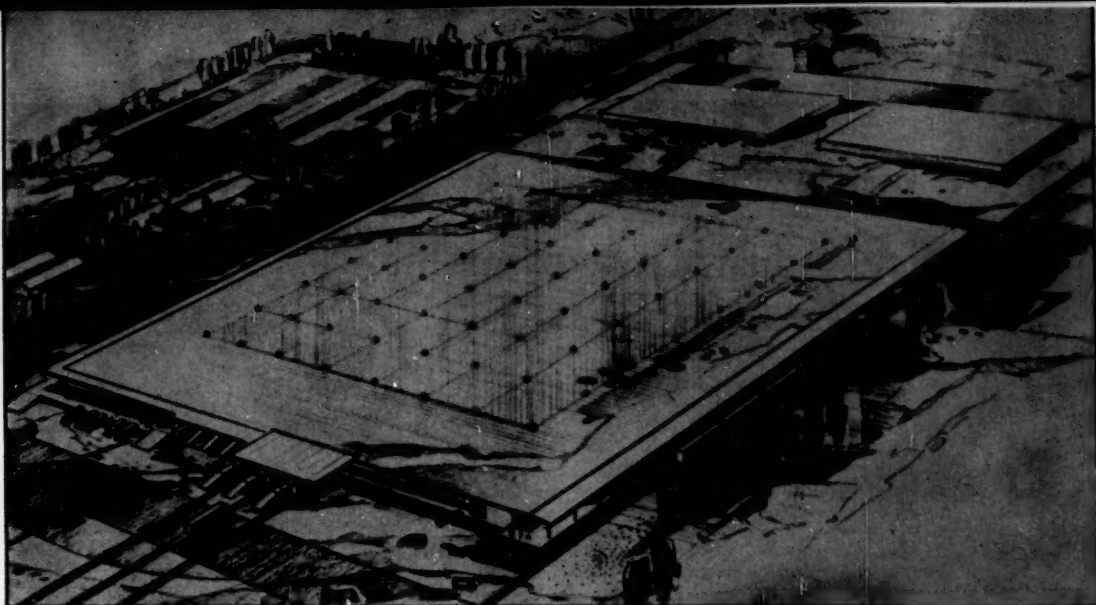
More recently an entirely different type of organization has established itself as an increasingly important factor in education. Already it has developed into a grass roots movement with strong support from a wide variety of groups and individuals. We refer to the Invest-in-America movement which had its inception over five years ago in Philadelphia and Los Angeles starting with a series of weekly lectures. These attracted wide interest out of which grew the concept of a "week" dramatizing the fact that we are all investors or potential investors in America and pointing out the true significance of this movement. The examples of Philadelphia and Los Angeles were followed by Detroit, and by the Spring of 1954 fourteen cities had received local charters from the National Invest-in-America Committee. Invest-in-America Week this year will be late in April and it is expected that twenty-two cities will participate. Appropriately enough, the national organization was incorporated on a non-profit basis in Pennsylvania with Mr. Frederic A. Potts, President of The Philadelphia National Bank, as Chairman of the Board. Among the Directors are: Mr. James B. Black, President, Pacific Gas & Electric Co., San Francisco; Mr. Wilfred D. Gillen, President, Bell Telephone Co. of Pennsylvania; Mr. J. Whitney Bunting, President, Oglethorpe University, Georgia; Mr. Louis P. Hoyer, Superintendent of Schools, Philadelphia; Mr. Edward Starr, Jr., Drexel & Co., Philadelphia, and Mr. Reese H. Taylor, President, Union Oil Co. of California.

The basic Invest-in-America theme is being furthered through the following program:

1. By coordinating the educational work for the same purpose now being carried on by the securities industry, commercial bankers, insurance companies, industries, etc.
2. By obtaining the cooperation of leading industrialists, financiers, educators, publicists and representatives of workers.
3. By furnishing speakers, scripts, plans for promotion, press releases and other publicity material.
4. By organizing and promoting discussion groups, lectures, seminars, public forums, demonstrations and other activities.

Finally and most important of all is the fact that a knowledgeable America with a widespread ownership of industry means a more productive America. As the late Wendell Willkie once said, "Only the productive can be strong and only the strong can be free."

MANUFACTURERS RECORD FOR



The National Homes Corporation plans to complete this huge \$1,000,000 plant by mid-summer. Its location in Tyler, Texas, is a tribute to intelligent and patient liaison between the Chamber of Commerce and all interested parties.

Tyler, Texas, Selected as Site For Largest U. S. Home Producer

National Homes Corporation of Lafayette, Ind., has announced that it will build a \$1,000,000 new plant in Tyler, Texas.

Construction will be completed by mid-summer, President James R. Price of National Homes said, and the first home will roll off the assembly line about Sept. 1. The new plant will serve the expanding Southwestern and Southern markets for the firm's prefabricated homes, Price said.

The plant, designed for peak production of 75 housing units a day, will begin production with about 300 workers, most of them to be employed locally. At peak production, it will employ about 2,000 craftsmen in three shifts, at an annual payroll of approximately \$5 million a year.

The plant will be located in Owentown, seven miles north of the Smith County courthouse. The 45-acre site will be in northwest Owentown, with 1900 feet of frontage on State Highway 155.

Announcement of the huge new industry climaxes several months of negotiations with National Homes on the part of the Tyler Chamber of Commerce, Tyler Industrial Foundation and Owen Development Corporation representatives, with assistance from the industrial departments of the Texas Power and Light Company and the Cotton Belt Railroad, on whose tracks the plant will be located.

In addition to the \$1,000,000 cost of the site and the plant, National will spend in excess of \$500,000 for special-purpose machinery and equipment. Another \$200,000 will be spent for trucks and other rolling stock to transport the homes and materials used in production, Price said.

"We have selected Tyler for this new plant because of its ideal location in re-

lation to the expanding markets we want to serve," Price continued.

"By truck transport we can cover within 500 miles of the plant here, which will enable us to reach markets in the South and Southwest. By rail, we will be able to reach as far north as Colorado and Wyoming.

"From the surveys we have made," Price continued, "we know that there is a good supply of dependable labor in this area. Equally important is the fact that there is a good history of labor relations.

Successful use of the assembly line and mass production methods of modern industry has made National Homes Corporation the largest producer of homes in the United States.

One out of every 48 homes being built today is a National.

A growing acceptance of the assembly line and mass production methods developed by the firm and used to produce 73,000 homes since 1940 will result in major changes in the building industry during the next 20 years, President James R. Price believes.

"I believe it will seem just as strange 20 years from now for any home builder to use current conventional methods—slow, costly, uncertain—as it would seem for conventional builders not to use prefabricated doors, prefabricated windows and a great many other prefabricated, standardized items that are accepted everywhere today," said the home manufacturer.

"What we call prefabrication is not something new," Mr. Price continued. "The only thing new is that we are going farther down this typically American road to standardized quality and lower cost."

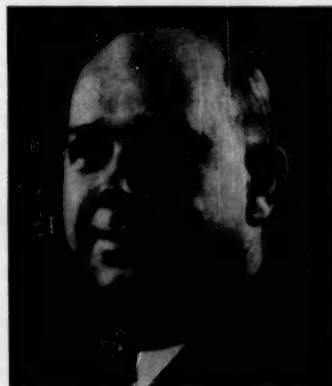
These are achieved in the production of National homes—at the rate of 120 a day during peak output—by the use of machines especially engineered for precision and speed.

The fact that National homes are produced by machine-age methods is important, Mr. Price believed, because they amount to extra dividends to the home buyer.

"They save money that can go into top design, the best of materials, and engineering that produces a better home at a lower cost. They are an assurance of quality in every National home."

National Homes works on the principle that as large a part of the building job as possible should be done in modern plants—on the assembly line—under controlled conditions—by skilled workers using special purpose machines.

The result is homes that are produced more quickly and economically under circumstances that permit a strict system of quality controls over raw materials and workmanship.



James R. Price
President

South Captures 58.6 Per Cent of Chemical Industry's Investments

By Sidney Fish

Industrial Analyst

THE South, which has been able to capture over 50 per cent of the chemical industry's new capital investments during the last ten years, is continuing to maintain this favorable ratio. Indeed, during the last year, chemical investments in the South comprised 58.6 per cent of the industry's total investments, according to an analysis by the Manufacturing Chemists Association.

Of a total of \$1.5 billion of facilities which are either under construction by the chemical industry or actually planned at present, approximately 58 per cent will be built in the South, according to the association.

Moreover, there is every indication that the chemical industry will steadily increase its total spending for new plants and equipment during 1955. For the industry's profits and sales have been rising steadily ever since the third quarter of last year. A new cycle of expansion and growth seems to be under way based on the need for taking care of the increased requirements of the country. New products, growth of population and a higher standard of living seem to assure steady growth in chemicals exceeding the rate of expansion in most other industries.

During 1954, the chemical industry showed unusual ability to control its costs during the recession of the first half of the year. Aided by the elimination of the excess profits tax, the industry wound up 1954 with a substantial gain in net income after taxes in spite of severe competition and some price cutting. The National City Bank's compilation of 46 chemical companies shows that their net after taxes last year increased 18 per cent, from \$581 million in 1953 to nearly \$687 million in 1954. Similarly, 24 makers of drugs, soap and cosmetics showed a gain of 24 per cent, or from \$129.8 million in net, to \$160.3 million. Seventeen

makers of paint and varnish showed a gain of 11 per cent, from \$31.6 million to \$35.1 million.

The earnings gain of chemical companies last year was several times as large as that of industry as a whole. With sales higher thus far this year, there is every indication that the chemical industry will chalk up another gain in net profit for 1955, even if there is a temporary lull during the Summer months.

The gain in sales and in earnings, coupled with increased depreciation charges allowed by the Revenue Act of 1954, make it possible for chemical companies to plow back larger amounts of retained earnings into new plants. They are thus continuing the expansion policy which is expected to enable the industry to register a fourfold gain in sales by 1975. American industry as a whole is currently writing off plants and equipment at the rate of \$6 billion a year. This sum provides an internal source of funds, supplementing retained earnings and funds raised by new investment. At the same time, dividend rates are being gradually liberalized, thus making it easier to attract new capital if expansion at any time exceeds the amount raised through internal sources.

In short, there is no reason why the current investment rate of the chemical industry should decline substantially over the next decade or two. In 1951, the chemical industry placed \$1.3 billion into new plants. In 1952, the total was \$1.5 billion. Another \$1.5 billion went into new investments in 1953.

The figures of the Manufacturing Chemists Association show that, in spite of the recession of late 1953 and early 1954, new investments remained very large. In this period, investments totaled \$1.216 billion, in 570 non-government-financed projects, of which 215 were completed between Nov. 1, 1953 and Oct. 31,

1954. In addition, 219 projects are being built at an estimated cost of \$933 million, and another 138 projects are to be built at a cost of \$581 million, under commitments already made. Most of the latter will be completed over a three-year period. In addition, many other projects are in the planning stage, and announcements concerning them have already been made during recent months.

Over and above privately financed chemical construction, there is an additional \$3.36 billion of government financed chemical and atomic energy projects, most of which have been placed under contract with chemical companies.

Following the trend in recent years, the South and Southwest showed the largest chemical expansion last year. Texas, which has become the fourth ranking chemical producing state, as a result of postwar growth, led the nation with 72 chemical projects costing \$571.4 million. Florida, relatively a newcomer in the chemical field with 17 projects, was second with \$235.6 million, and Louisiana with 26 new plants was third with \$232.7 million.

The table shows how other Southern states did in new chemical investments during the year ended Oct. 31, 1954.

The heavy concentration of chemical investments in the Texas-Louisiana area is accounted for largely by the huge expansion of the petrochemical industry. This includes plastics, fertilizers, insecticides and many basic chemicals.

Of the \$2.7 billion of projects planned, under construction or completed for the twelve months ended Oct. 31, 1954, the largest investment, \$657 million, was in a wide general group of chemicals. The second largest, \$616 million, was in polymeric materials, chiefly plastics. In third position was the \$595 million going into agricultural chemicals, mostly for fertilizers. The South is getting a large proportion of all three categories, particularly agricultural chemicals, as larger use is made of fertilizer and insecticides.

Synthetic organic chemicals were in fourth place, with \$467 million of new plants. In addition, \$154 million is going into metals and alloys, including magnesium, titanium and zirconium. More than \$57 million is being spent on new research facilities. Other projects total \$185 million.

Most of the chemical facilities built in the South during the last year will produce basic chemicals. Most of these are large, highly mechanized installations, which require heavy investments, and which result in high output per man hour. Hence, hourly earnings of workers in such plants tend to be well above the average. Availability of raw materials, including petroleum and natural gas, accounts largely for the installations in the Gulf Coast states.

An illustration of how investments in Louisiana have been distributed is provided by the Manufacturing Chemists study. Agricultural chemicals accounted for \$111 million, or nearly half of the total of \$232.7 million for the year ended Oct. 31 last; synthetic organic chemicals, \$48.7 million; sulfur and sulfuric acid, \$18.5 million; petroleum and natural gas,

STATE	PLANNED	UNDER CON- STRUCTION		COMPLETED	TOTAL
		(by thousands)			
Alabama	\$11,000	\$ 5,322		\$14,102	\$30,424
Georgia	3,500	14,400		24,000	41,900
Kentucky	12,250	27,800		21,950	62,000
Mississippi	400	20,000		17,500	37,900
North Carolina	2,100	9,660		7,250	19,010
Oklahoma		7,000		22,750	29,750
South Carolina	250	8,527		1,035	9,812
Tennessee	4,600	28,600		11,750	44,950
Virginia	13,000	38,547		20,172	71,719
West Virginia	3,600	34,395		36,415	74,410



Davison Chemical Corp., division of W. R. Grace & Co.'s new \$10,400,000 plant near Bartow, Florida, for the manufacture of triple superphosphate.

\$17.6 million; and other chemicals, \$6.5 million. Today, as a result of recent rapid growth, Louisiana is ranked thirteenth among chemical manufacturers.

The rapid growth of the chemical industry is accounted for not only by new uses of plastics and other chemicals in rapidly growing industries, such as appliances, construction and automobiles, but also by the development in the laboratories of entirely new chemicals. Synthetic fibres for textiles, new plastics and plant foods have all helped the growth and profits of chemical companies. It is estimated that over 40 per cent of current volume is in chemicals which have been developed in the laboratories during the last fifteen years.

The expansion of the industry appears to favor certain chemicals in one year, and another group in the next, as markets expand and new uses are developed. Two or three years ago, for example, serious shortages of soda and chlorine prompted heavy new investments to create additional capacity in those fields.

Caustic soda capacity increased from 525,000 tons in 1925, to over 3 million tons in 1951 and since continued to grow rapidly. In a little over twenty years, chlorine capacity increased from 205,000 tons to 2,409,000 tons. Plastics have been regarded as exceptionally promising in recent years, and have enjoyed continued growth. In the agricultural chemical field, heavier use of fertilizers has arisen from the efforts of farmers to obtain larger yields from smaller acreage being tilled.

All of the major chemical producers have made important investments in the South in recent years. The continued growth of big basic chemical plants in the South leads to the hope that in the future important expansion will take place in finished chemicals which will process the raw chemicals. Already, this is occurring in Texas and other states. Meanwhile, the paint and pigment indus-

try is expanding in Southern states, and is setting up new plants to take care of the growing Southern market. The location of man-made fibre plants in the South strengthens the hold of textile and chemical industries in this area.

One example of the South's growing

chemical industry is the huge new plant built by Davison Chemical Corp., shown above. Built on a 45-acre tract near its phosphate rock mining properties in Bartow, Florida, this new plant will produce at a yearly rated capacity of 200,000 tons.



S. R. I.'s Advice Good in '44—Better Now . . .

"Stay South, Young Scientist!"

by Wendell Givens

WHEN the Southern Research Institute at Birmingham, Alabama was established in 1944, the founding fathers hopefully posted this entreaty: "Stay South, young scientist!"

Today, thanks largely to S.R.I., he is staying.

Prior to the coming of the Institute, virtually all the South's technical talent was drained off, even before it was developed. Students in technical fields headed east and north for post-graduate training, and very few of them ever returned.

Despite the tremendous backlog in research and development built up during World War II, the South apparently was destined to continue losing its technical brains, until Thomas W. Martin, then-president of Alabama Power Company, converted a dream (Southern Research Institute) into reality.

Today S.R.I.'s staff is composed of 120 topnotch scientists and 30 auxiliary personnel. Almost 300 scientists have signed the waiting list!

An even more impressive figure, as Southern industry is concerned: Forty S.R.I.-trained scientists have moved on into Southern industry, there to establish on-the-job research laboratories.

Loss of the 40 specialists seemingly would be a severe blow, but actually it's part of S.R.I.'s total program and purpose—to make technological advantages available to Southern industry and to provide a place for technically-trained Southerners to work.

"Sure, we hate to lose them," commented S.R.I.'s director, Dr. William M. Murray, Jr., "but Southern industry will benefit."

And S.R.I. never worries about a staff personnel shortage. Recently the Institute ran a help-wanted ad for a chemist—and received 100 applications. "These applicants were not out of work," Dr. Murray explained. "Most of them already held good positions in industry, but they recognized the potentialities and prestige of being on our staff."

One of those attractions is the S.R.I. retirement setup. In most concerns an employee who leaves forfeits all pension benefits he has built up. But at S.R.I. he is credited with retirement benefits even if he resigns.

The backlog of applications provides a rich source for Southern industries seeking research men.

S.R.I. project investments this year will exceed \$1,400,000, a 20 per cent increase over 1954. And, as in past years, more than half the projects—in both volume and cost—are Southern-sponsored.

The Institute does not limit its project sponsors to the South, of course; some of its top jobs have been for concerns outside the region. But no Southern company has been or will be turned down on a project request.

The work from other areas of the nation helps S.R.I. to grow, financially and prestige-wise. The staff this year will carry out research on at least 100 projects.

In its first decade the Institute tackled more than 600 projects. As most of these were industry-sponsored, the results became the property of the sponsors and were not publicly disclosed. Many of the 600 are still in progress.

One of the more significant of recent projects was sponsored by the B. F. Goodrich Chemical Company, and directed by Dr. Edward Abrams. In the Institute's textile section (in which a full-scale textile "mill" has been installed), Dr. Abrams and his staff discovered that a rubber-like latex (trade name, Hycar) would triple the life of denims, make them crease resistant and color-fast.

Spot sales already have proved the new process a commercial success and the U. S. Navy has approved it for fatigue uniforms. Textile manufacturers have been customarily cautious about the new process because of slightly higher production cost but a bright future apparently is ahead for Hycar-sized denims.

Another highly significant project at the Institute is low temperature carboni-

zation (coking) of coal. A pilot plant has been in operation at S.R.I. more than two years.

The principal problem now appears to be finding uses and markets for the tar. Success in the project would benefit the coal, petroleum and electrical industries; coal, through the vast new field for the product; petroleum, through use of the tar in making other chemicals; electrical, through lower cost fuel.

S.R.I. researchers point out that obtaining a greater amount of tar may make the mining of coal pay for itself. The Alabama Power Company is sponsoring the coal project.

Among S.R.I. developments for the U. S. government is an instrument that analyzes the amount of water in nitric acid. Institute scientists have developed a field instrument that GIs can operate, have cut down on the weight of the original instrument, and have built 10 lighter ones that can analyze water in four or five minutes, where four or five hours once was required.

Still another recent S.R.I. discovery: Rice oil as a good, cheap substitute for olive oil in cooking. Potatoes, for example, cooked in rice oil were found to be just as tasty, yet not nearly as greasy as when cooked in ordinary grease. So, Southern cooks may soon be frying foods in rice oil.

Cancer research at the Institute this year will run \$300,000. "This work," Dr. Murray stressed, "is not simply a search for a cancer cure. That is the ultimate aim, of course, but meantime many Southern industries have benefited from discoveries in related fields. Pharmaceutical houses, for instance, are interested in certain facts about drugs we have experimented with; grain companies, about animal feeds, and so on."

The handsome Kettering-Meyer Laboratory, opened last year, houses cancer research. The lab was made possible through a grant of \$200,000 from the Charles F. Kettering Foundation and a grant of \$100,000 from the Robert R.

Meyer Foundation. The S.R.I. cancer research staff, whose work is affiliated with the famed Sloan-Kettering Institute, began with two researchers; the staff now numbers 40.

Mr. Martin (aforementioned as the principal dreamer and builder of the Institute) as board chairman is still the backbone of S.R.I. He visits the plant, on Birmingham's Southside, three or four times a week to check on operations.

The esteem in which Mr. Martin is held by all connected with S.R.I. is evidenced by a portrait of him that hangs in the library. Speaking for those who gave the portrait, Gen. John C. Persons, a vice-chairman of the Institute, said: "... It is particularly fitting that Tom Martin's portrait hang here, for he breathed the breath of life into this institution in its infancy, and he, more than anyone else, has kept it alive and growing until it has become one of the South's most important efforts. . . ."

But Mr. Martin is quick to pass on credit to others—Concerning the capital fund (\$3 million) which enabled S.R.I. to provide its buildings and permanent equipment: "Southern manufacturers, trade establishments, banks, railroads, utilities, Southern insurance companies, newspapers, foundations, individuals and a few concerns outside the region."

Concerning the researchers: "They are making a life work of this effort to bring industrial research to the Southern region, and those men and women are becoming recognized amongst the more important of American research scientists."

At the tenth annual Institute dinner, Mr. Martin recalled that S.R.I.'s very modest beginning was in an old carriage house—that today it has buildings and laboratories of 64,000 square feet of floor space.

He pointed to the large number of patents which have flowed to industry sponsors who have committed their research work to the Institute—and to the increasing amount of literature that S.R.I. scientists have contributed to the thinking and the science of research.

Dr. Charles F. Kettering, former vice president of General Motors in charge of research and a member of S.R.I.'s Board of Trustees, urged the Institute to pursue the "double profits" system—"profit that the customer gets that always has to be bigger than the manufacturer's." He pointed out the S.R.I.'s research customers must always benefit more from that research than the Institute itself.

Gen. Robert E. Wood, retired board chairman of Sears, Roebuck and a member of the S.R.I. Advisory Council, painted a glowing picture of what the South can achieve in the years ahead. He laid great stress on the role Southern Research Institute can play in that future. He remarked: "You have in this Institute a great instrument to further your progress. Scientific research, study and correct analysis are the keys of modern progress and the means of raising the living standards of your whole population. Your businessmen, your corporations, your governmental bodies should stand by it and support it to the limit."



Chairman Thomas W. Martin (left) and Director William M. Murray, Jr., discuss an S.R.I. research product now being manufactured. In the background is the handsome new Kettering-Meyer Laboratory for cancer research.

Officers of Southern Research Institute are: Thomas W. Martin, chairman; Gen. John C. Persons, H. Austill Pharr, William J. Rushton and John A. Sibley, vice chairmen; William M. Murray, Jr., vice chairman and director; Locke White, Jr., assistant director, in charge of the Physical Division; Francis O'Brien, assistant director, in charge of the Engineering Division; Carl Bordenca, assistant director, in charge of the Organic Division; Rollin Osgood, Jr., assistant director, in charge of the project development activities; Howard Skipper, assistant director, in charge of the Biochemistry Division.

The diversity of the Institute's research work is evidenced by this list of concerns which sponsored entirely new projects at S.R.I. in 1954 (in addition to scores of others already underway):

Sloan-Kettering Institute for Cancer Research, New York; Parke, Davis & Co., Detroit; Tennessee Coal and Iron Division of U. S. Steel, Birmingham; Mon-

santo Chemical Co., St. Louis; Anchor Rome Mills, Rome, Ga.; Southern Chemical Cotton Co., Chattanooga; Alabama Gas Corp., Birmingham; Mobay Chemical Co., Anniston, Ala.; DeBardeleben Coal Corp., Birmingham;

Alaga Syrup Co., Montgomery, Ala.; Gulf Naval Stores Co., Gulfport, Miss.; Chamber of Commerce, Tuscaloosa, Ala.; Alabama Gravel Co., Birmingham; Lance, Inc., Charlotte, N. C.; Fiber Products Co., Hattiesburg, Miss.; Armour & Co., Chicago; International Paper Co., Mobile; Alabama Marble Co., Gantt's Quarry, Ala.;

Alabama Metal Lathe Co., Birmingham; Tennessee Corp.; College Park, Ga.; Douglas Aircraft Co., Santa Monica, Calif.; Girdler Co., Louisville; Duke Power Co., Charlotte; American Society for Testing Materials, New York; American Society of Mechanical Engineers, New York, and Comet Rice Mills, Houston, Tex.

Knoxville Metal Bellows Firm Marks 50 Years of Service



THE shiny, symmetrical piece of metal shown here is one of American industry's most useful tools. The metal bellows, a device that ranks in importance with the rivet and the gear, begins its second half-century as a versatile performer in countless ways.

As the heart of an automatic heating system, it controls healthful temperatures in homes, office buildings, ocean liners and railroad cars. In newest jet aircraft, metal bellows withstands gas pressures at 1,100°F. as well as at 65°F. below zero. In heavy industry, they insure accurate temperature control of liquids, etc., so that products like chemicals, textiles, drugs, rubber, and high octane gas keep a high level of quality and uniformity. They are also found in greenhouses guarding the growth of delicate plants and flowers.

Bellows went to war in 1941 and their performance record was distinguished. One executive noted they could be found on anything that "rolls, floats, shoots or flies." While many of their ingenious and interesting applications are military secrets, metal bellows are a vital part of bomb sights, oxygen regulators for high altitude flying, and are doing important work in nuclear energy plants throughout the country.

Made from many different metals, bellows can best be described as precision-made cylinders whose thin walls have been deeply pleated similar to those of an accordion or folding camera. Once the metal tubes have been corrugated and formed into bellows, they can be expanded and contracted. Final characteristics are determined by the number of

corrugations, thickness of the tube, and type of metal used.

Designed to varied specifications, an almost infinite number of different kinds of bellows have been produced to fill tough assignments. For example, they are made in diameters ranging from a fraction of an inch to one foot and larger; and in metals like bronze, beryllium copper, Monel, stainless steel, Inconel "X" and phosphor bronze. Early bellows were fabricated from brass, as the majority of them are even today.

The metal bellows is an American invention, the development of a Southerner once described as a "most masterful mechanical miracle-maker." Weston M. Fulton at 27 headed the U. S. Weather Bureau Observatory at Knoxville, Tennessee. His position at the weather bureau enabled him to carry on post-graduate work in mechanical engineering at the University of Tennessee, and also to do some "scientific tinkering" in a backyard woodshed.

There he worked out numerous improvements, including an instrument that automatically recorded stages of a river.

Later, in an effort to forecast the weather more accurately, Fulton wanted to know how much the atmosphere expanded when lightning flashed through it. To provide the answer, the young meteorologist planned a tiny tube of metal whose walls were machined into rhythmic folds—the first bellows. Sealed at each end, the bellows would respond to the slightest variation in atmospheric pressure.

Fulton searched in vain for a machinist to construct the first bellows. After pondering the problem for many weeks, Fulton worked out designs for a set of strange tools.

The first metal bellows was a soldered affair and the soldered seams burst under stress. Fulton finally perfected a method of producing seamless bellows from drawn brass tubes. To Fulton, the bellows fulfilled the original purpose of his labors—that of creating a better weather forecasting instrument. But more than that, he began to see commercial applications for his device.

A chance remark by a neighborhood steamfitter, visiting the backyard woodshed, turned Fulton's thoughts from weather forecasting. "There's a fortune waiting for anyone who can apply your bellows as an automatic damper regulator on furnaces in homes," the plumber told him.

Fulton took up the challenge, designing an automatic damper control for hot water heating systems. The nucleus

of the device was a sealed bellows, which contained a volatile liquid of low boiling point. Its operation was simple; heated water in the furnace boiler caused the volatile liquid encased within the bellows to boil. This boiling liquid gave off gases which expanded the bellows, in turn closing the draft, thereby checking the fire.

As the water temperature fell, the bellows contracted, pulling the damper open again. A variation of the same bellows regulator was applied to steam systems.

On that day, Fulton began years of development work that was to make the bellows useful in many ways. As the unseen "brain" of the automatic damper, the bellows has saved home owners hours of drudgery. It has saved millions of tons of fuel. More important, it has provided even, healthful room temperatures in nurseries, hospitals, schools and homes.

On November 21, 1901, the inventor filed the first application for a patent on his bellows.

Fulton's limited capital was now exhausted and he obtained financial backing from friends. On November 18, 1904, the bellows was in commercial shape and an enterprise was formed under the name The Fulton Company. Later, the company title was changed to the Fulton Siphon Company to identify the organization more closely with its product, which Fulton named "Siphon" after the Norse goddess of the atmosphere.

A small plant was equipped to produce Siphon bellows and apply them to temperature regulators and steam damper regulators. Samples of the product were submitted to numerous prospective customers but no sales were made. Many heating equipment companies were approached to buy the product, but it was considered too novel.

After 11 months of knocking on doors, Fulton's company entered into a contract with a large heating equipment manufacturer, which agreed to buy all the bellows Fulton could produce in the next ten years.

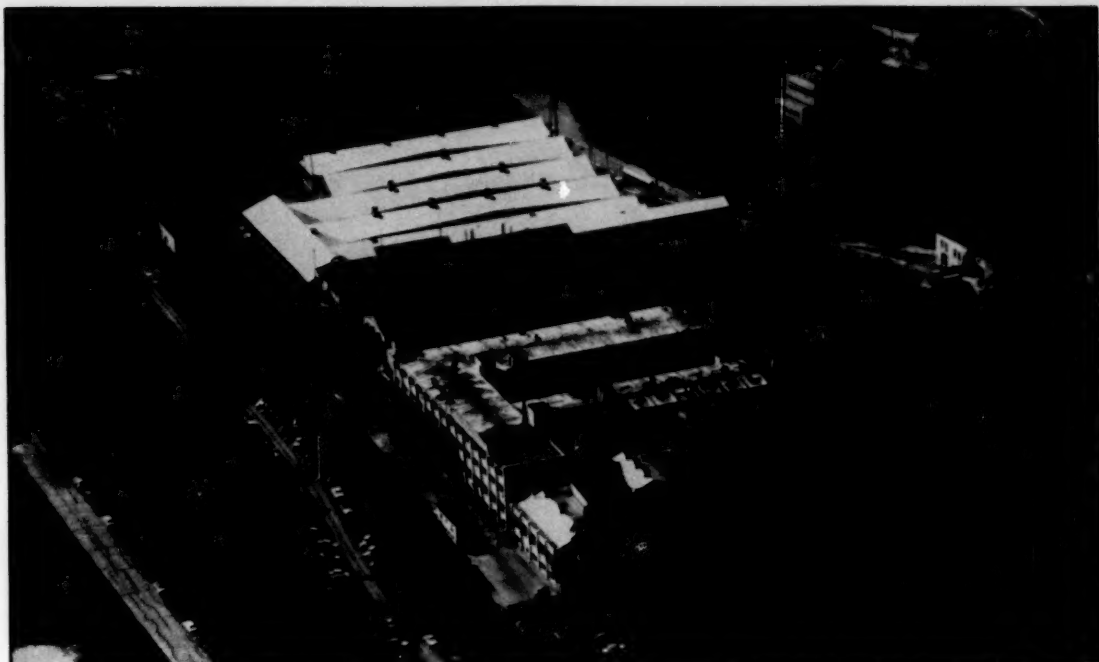
By 1914, the company had grown sufficiently to warrant the construction of a large plant. An 11½ acre site was chosen along a broad avenue on the outskirts of Knoxville.

Today, this plant occupies approximately a half million square feet of floor space and employs about 1,900 people, of whom approximately ten per cent have over 20 years of service. Fulton's plant is now considered one of the largest manufacturing installations in the world producing metal bellows and bellows devices.

Among the 600 machines are vertical and horizontal punches and drawing presses, pickling equipment, heat treating ovens and furnaces, automatic screw machines, assembly conveyors, soldering and welding equipment, testing equipment, as well as special patented bellows-producing machinery.

A new foundry at the plant is equipped with melting furnaces, ultra-modern ladles and ladle conveyors, molding machines, core room equipment and flasks.

While this manufacturing center is prepared to produce almost any "miracle



Aerial view of Knoxville, Tennessee, home of Fulton Sylphon Division, Robertshaw-Fulton Controls Company.

in metal," its main product lines fall into the following groups: liquid temperature regulators, air or gas temperature regulators, hot and cold water mixers, temperature control devices for automobiles and aircraft, automatic radiator valves, fluid drive transmission seals, automatic thermostats and packless valves.

In 1947, the Fulton Sylphon Company, Robertshaw Thermostat Company and Bridgeport Thermostat Company were merged to form the present firm, Robertshaw-Fulton Controls Company. With this merger Fulton's organization became the new company's Fulton Sylphon Division.

Jean V. Giesler, who joined Weston Fulton as a draftsman in 1913, now heads the division. An executive vice president and director of Robertshaw-Fulton, Giesler is recognized today as one of the key experts in the applications of bellows and bellows devices. Under his direction, the plant's output continues at an ever-increasing rate.

Beginning as long strips or coils of metal stock, bellows are turned out in a smooth, uninterrupted flow. In one operation, discs of metal are punched out and formed into deep cups. The cup then goes through a series of drawing and annealing operations, establishing the diameter and wall thickness of the tube. The tube is then trimmed to correct size.

Most bellows under 4½ inches outside diameter are formed hydraulically; larger units are formed mechanically with roll dies. To produce the former, tubes are placed in special hydraulic machines, where pressure is applied inside the tube, forcing it to take the shape of the cor-

rugated die. The inside diameter of the hydraulically formed bellows is the same as that of the tube and, consequently, "cold work" is imparted chiefly to the outer bends.

The other process used to make bellows, consists of forming a number of broad corrugations in the tube wall and successively deepening and narrowing these broad corrugations with suitable rolls. The diameter of the tube used in making the rolled bellows is less than the outside and greater than the inside diameter of the finished bellows. "Cold-work" is, therefore, imparted to both inner and outer bends, resulting in bellows that have elastic characteristics suited for many special applications.

The final number of uses for metallic bellows will probably never be determined. So varied are its properties that even veteran bellows experts avoid hazarding a guess. But their usefulness continues to grow as each year hundreds of new commercial applications are found.

Hiring a New Salesman Costs Average Company \$6,000

A mistake in hiring a salesman costs the average company more than \$6,000, a recent American Management Association survey of company practices in selecting salesmen indicates.

Estimates of the over-all cost to the company when a man hired for a sales job proves unsatisfactory after a fair trial and has to be terminated were as high as \$20,000 in some cases. Average figure

named by the 136 firms that attempted to estimate the cost was \$6,684; nearly a fourth of the respondents put the cost to them at \$10,000 or more.

The study also shows that aptitude tests, personality profiles, and the other new devices of the industrial psychologist have not yet replaced the old-fashioned interview as the basic method of selecting salesmen. Asked to state the selection device on which they placed the most reliance, more than four fifths of the responding companies cited personal interviews, usually by more than one person. Many of them, however, said they relied on interviews in combination with tests, personal history forms, work history, or recommendations of former employers.

The A.M.A. survey dealt with sales selection practices of 180 companies, mostly manufacturers; areas covered included recruitment, interviewing, application forms, tests, and reference checks. Its results are incorporated in a research report just published by the 20,000-member management educational association. The report, entitled "A Company Guide to the Selection of Salesmen," also deals with the organization and administration of the sales selection program and is illustrated with forms in company use. It was written by Milton M. Mandell, since 1945 chief of the management testing unit, standards division, United States Civil Service Commission.

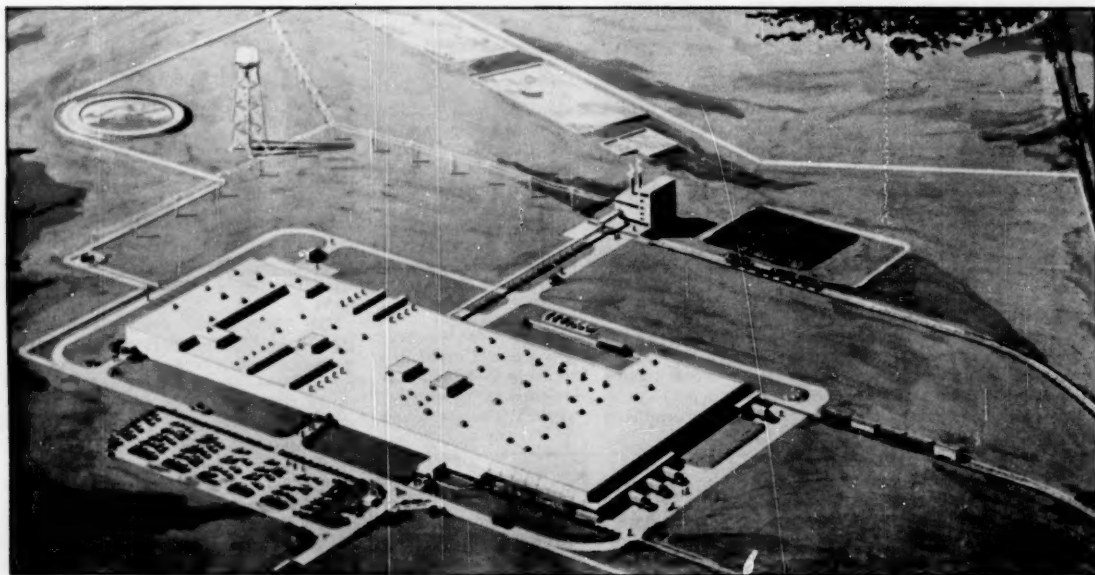
Copies of the report may be obtained by writing Publications Sales Department, American Management Association, 300 West 43rd Street, New York 36, N. Y.

INDUSTRIAL



IN NORTH CAROLINA

Modern new plant of the Hadley Corporation at Weaverville, for the manufacture of full fashioned cashmere and woolen sweaters. Lockwood Greene Engineers, Inc. of New York and Spartanburg, S. C. are the Architects-Engineers on the project.



IN SOUTH CAROLINA

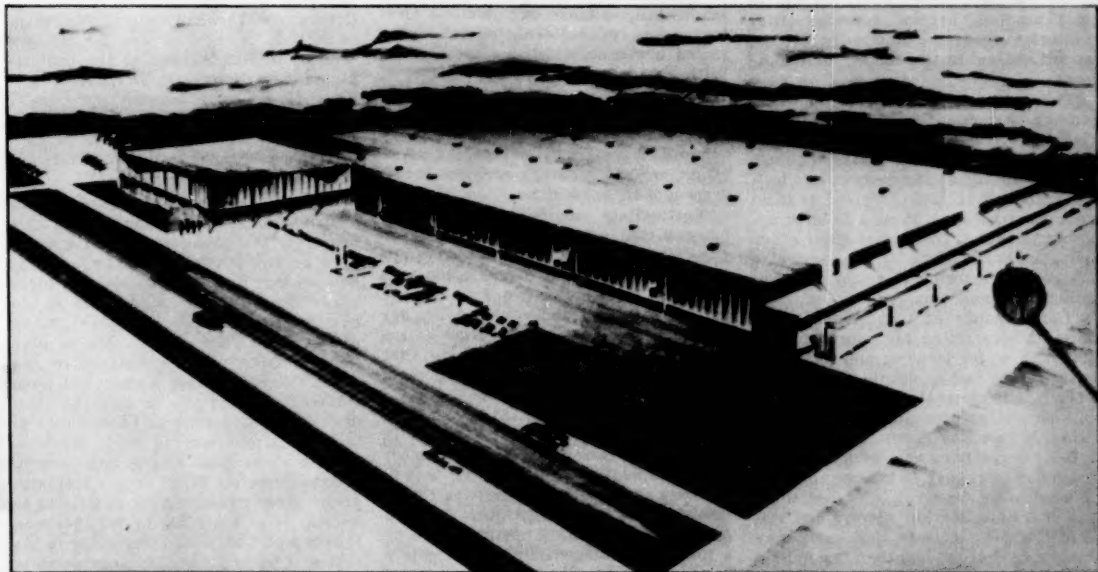
This multimillion-dollar finishing plant will be built by the Kendall Company at Bethune. When completed the plant will employ about 220 persons and will provide 300,000 square feet of floor space. Daniel Construction Company are constructors, engineering by Lockwood Greene Engineers, Inc.

EXPANSION



IN KENTUCKY

This ultra-modern plant of Wesson Metal Corporation at Lexington is now in full operation. This plant has enabled the firm to more than double its production of cemented carbides for metal cutting applications.



IN MISSISSIPPI

Artist's conception of the new plant to be built at Grenada for McQuay, Inc., manufacturers of unit heaters, air conditioning apparatus, coolers, evaporators, coils, automatic ice makers and other equipment. John L. Turner & Associates, Architects & Engineers of Jackson, Mississippi, are in charge of the project.

Progressive Northern Pump Firm Selects St. Petersburg Site

President in luncheon talk outlines the reasons for
his firm selecting the Florida site and states eight responsibilities
of management that contribute to company growth and well being.

*Text of Talk Presented by Mr. Robert T.
Sheen, President of Milton Roy Com-
pany, at Chamber of Commerce
Luncheon, St. Petersburg,
March 14, 1955*

"MILTON Roy Company is typical of small, rapid-growth companies most active in the field of manufacturing instruments and equipment, having their principal markets in the new industrial revolution that is dynamically driving toward the automatic factory of tomorrow.

"This company's 'beanstalk' growth began as a partnership in 1936. In that year my father, Milton Roy Sheen, and I began the manufacture of chemical feed pumps to meter water treating chemicals to boilers. Although at first conceived as little more than a hobby, it soon became apparent to us that there were many other industrial applications for this particular flow control instrument, known as a Controlled Volume Pump.

"The demands of this venture soon caused me to resign my consulting activities in water treating and industrial waste plants and to devote full time to this new enterprise. In 1946 the partnership became a corporation. In 1947 my father, Milton Roy Sheen, passed away. In 1948 the company enjoyed its first million-dollar sales year. In the current year, 1955, sales are expected to exceed three million dollars. Market surveys and statistical studies indicate that sales may attain a level of not less than five million dollars per year during the period 1958 to 1960.

"A logical question that may arise is, 'how does this rapid growth affect your physical plant facilities?' The first property owned by the company, and the current plant site of two and one-half acres, is located in the Chestnut Hill section of Philadelphia. The original small ranch-type building has been constantly expanded and now occupies approximately

40,000 square feet of area. It is possible to add additional plant to this two and one-half acre site. However, 'good neighbor' considerations led to a decision to keep the balance of the property well landscaped; to make our plant an asset to the fine residential district of higher priced homes in which we are located. With the current 40,000 square feet of plant area, we do not believe it possible to operate economically if the number of our employees exceeds 200. Since we currently have 170 employees at this location, we are rapidly approaching saturation of these facilities.

"Fortunately, company management foresaw that we would shortly outgrow our Philadelphia plant and would require a second location. It is fortunate, too, that up to the last year or two, I carried the major portion of the responsibility for building sales and the sales organization of our company, an undertaking that brought me and our company plane to 47 of the 48 United States.

"A series of visits to St. Petersburg began in 1947, when I visited Mr. R. B. Saalfrank, a consulting design engineer whom we had retained. This trip was in fact one of my first longer trips that I flew solo. On flying into Albert Whitted Airport, I was immediately impressed by a town sufficiently air-minded to locate a downtown airport for the convenience of personal and business pilots. Although Mr. Saalfrank occasionally worked with us in Philadelphia, he did much of his work here at his Florida home. As a result, my business trips to Florida became more frequent.

"In the meantime, I had had ample opportunity through extensive traveling to survey all sections of the United States and the more I traveled, the more I am

frank to confess that other sections have suffered by comparison with St. Petersburg, when viewed in the light of potential ideal areas for future operations. In the interim, other officers of our company had visited St. Petersburg and we have had an increasing number of meetings here.

"In 1953, the search for a suitable industrial location in the vicinity of St. Petersburg began in earnest. I first called on your Chamber of Commerce and had a number of most interesting and informative discussions. The Chamber of Commerce has been most cooperative and helpful. Following this initial discussion, many meetings have been held with this organization, your local banks, and the Florida Power Company, with the finest cooperation given by each.

"Our operations in St. Petersburg began on a small scale. We decided to first lease a small building and to use this as a pilot branch plant. This building comprises approximately 5,000 square feet and is staffed with our first three Florida employees. Just last November a \$25,000 Cleveland automatic machine tool was placed in operation at this location. Additional tools are scheduled to be added in the near future at this leased plant and prior to the time that we will build our second plant.

"We finally decided on our full-scale plant site shortly after the beginning of this year. This area, 52 acres of ground on Park Street, is bounded on the north by 54th Avenue North and on the west by Cross Bayou with approximately one-half mile of water frontage. Milton Roy Company will extend fullest cooperation in matters of right of way for this extension of 54th Avenue to the contemplated new bridge. In purchasing this property, we were assisted and advised by Mr. William C. Kaleel, Esq., of St. Petersburg, who has also been of considerable assistance to us in formulating our plans for this location.

"Current plans call for a combined industrial-residential development of this property. The architecture and appearance of any planned plant facility will be such that it will be an asset to a high-grade residential community, as is the case with our Philadelphia plant. Many of our employees will be able to plan homes within walking distance of the plant. Many of these homes will have water-front locations, to give the most desirable combination of accessibility to water and proximity to work. We hope to plan an original unit of construction of approximately 20,000 square feet with ample ground reserved for expansion to a total of at least 200 to 250 thousand square feet. This would mean that in the first unit we could readily accommodate up to 100 employees with an ultimate possible plant accommodating up to 1,000 employees.

"I should hasten to add that this is long term planning. Plant location, building, and expansion does not happen overnight. We do not expect to build this first unit for at least a year or two, although with the ground at hand, we will be prepared to move quickly into plant con-

struction should our business expand at a sufficiently rapid rate. Our present total payroll in Philadelphia is in excess of three-quarters of a million dollars. Considering our future expansion in St. Petersburg, there is no reason why this could not be duplicated in St. Petersburg by 1960.

"We do not plan to move our Philadelphia plant and existing organization to St. Petersburg. To do so means disruption of too many families, facilities, and operations to say nothing of the expense involved. It is, however, perfectly possible and, in fact probable that our executive offices will move to St. Petersburg just as soon as this plant reaches the size that will warrant this move. I am so confident of this ultimate objective, that I am just now completing the building of a new home for Mrs. Sheen and myself on Paradise Island, here in St. Petersburg.

"One of the questions that I have been asked on several occasions is 'Why did you choose St. Petersburg for your new plant site?' Frankly, I have personally flown over these entire United States and have found no place that, from my plane, looks more beautiful than St. Petersburg, or that offers more combined advantages for working and living. I can see no reason why our employees should wait until retirement before being located in a climate and with working conditions that they might as well enjoy while engaged in active work. This climate provides our employees with opportunity to enjoy a better balance between work and play. Most of us, we believe, are hard core lovers of sun and recreation. Why not build the plant in a climate where our employees can spend their non-working hours in healthful relaxation and play?

"I can assure you, too, that we have carefully investigated the elements of cost and climate for business growth. Our purchasing agent visited here for approximately one month, investigating possible suppliers of raw materials. He submitted a most comprehensive report covering his findings. While potential suppliers are not by any means as plentiful as they are in our Philadelphia area, we could find no serious obstacles from the standpoint of supply. Shipping costs to us are a fraction of one per cent of our total costs and are all less than carload when by rail. The majority of our shipments are by motor truck. While power costs are slightly higher here than they are in Philadelphia, over-all costs of plant operation including projected costs for air-conditioning, are no higher than for a comparable Philadelphia plant. Your tax climate, at the present time, is a favorable one to attract industry and is certainly an inducement for location, particularly when compared to some states where increasing corporation income taxes are being relied upon to an ever-increasing extent as a source of state and local revenues. As a corporate citizen, we naturally expect to pay our fair share in support of local government as long as this fair share does not become discriminatory or a Gargantua that consumes a company's initiative and desire to grow.

"We are not dependent on local mar-

kets, nor are we particularly looking at the markets in Florida for our products any more than the markets in the rest of the country or throughout the world. Our chemical pumps and instruments are used in many industrial applications and play an important part in the manufacture of synthetic rubber tires, foam rubber seat cushioning, lubricants, gasoline, paper, nylon and other man-made fabrics and plastics, paints, carbonated beverages, fuel oil and many chemical products. They have found an increasing application in the atomic energy plants as well as in the huge generating stations that supply electricity to our homes and industry. I am happy to say that we have a number of our units in the plants of our good customer, the Florida Power Company. Our pumps are sold all over the United States and the Free World.

"The wide demand for our equipment, however, is only part of the story of our company's growth. Starting in my dad's basement and with the savings that I had from my consulting work, this company was born and grew by reinvestment and then by the investment of our employees and sales representatives. Just this last year, we decided to open a small portion of our stock for public ownership and registered our stock with the Securities Exchange Commission. Today we have approximately 150 stockholders.

"The company is people, and Milton Roy has not lost sight of the human aspect in business. Our philosophy of business management has been expressed as a Creed, dedicating our company to the application of the Golden Rule in all phases of its business relationship; with its customers, its management and employees, its stockholders, its sales representatives, its suppliers, the government and with its neighbors. A portion of this Creed expressing our responsibilities to our employees, for example, reads as follows:

"We believe that it is the responsibility of our Board of Directors and our management to formulate policies and long-range programs, to plan for the continual growth of the company and to operate our company at a profit; that our management has the responsibility:

1. To provide steady employment at a salary or wage at least equal to or better than the prevailing rates for comparable services in the community.
2. To respect the dignity of the individual.
3. To provide pleasant work surroundings and to provide the best possible tools with which to accomplish the assigned task.
4. To provide opportunities for advancement to company personnel first before considering outside applicants.
5. To provide job training and management training for employees and supervisors to better equip them for promotion and advancements.
6. To keep our employees fully advised of our plans and operations as soon as such plans crystallize.
7. To provide or help make available suitable employee benefits, such as: Blue Cross, Accident and Sickness Insurance,

Group Life Insurance, Retirement Benefits, etc., and

8. To provide opportunities for purchase of company stock so that the employee may share the ownership profits and growth of the enterprise.

"The application of this philosophy is evidenced by the fact that more than half of our employees are included in the list of stockholders of Milton Roy Company.

"Residents in the state of Florida will be interested in that portion of the company philosophy as it applies to our neighbors:

"We believe that:

1. We should maintain our property in first class condition, making our plant and grounds as attractive as possible.
2. We should actively support community projects that will benefit the community, and
3. Our conduct shall always respect the property and the rights of our neighbors.

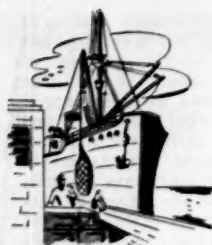
"You, as business men and residents of St. Petersburg, are undoubtedly interested in this story to the extent that it may assist you in determining the motivations that prompted an industry such as ours to select St. Petersburg for a future business site. Much of our equipment is classified as an instrument. I have the honor to now be serving as the National Secretary of the Instrument Society of America and this body recently had an Executive Board Meeting in St. Petersburg at my invitation. I believe that much of your appeal to industry could be made particularly to this class of light industrial manufacturer, to the manufacturer of instruments and instrument components. With these manufacturers, shipping costs are not a determining factor in plant location. A pool of skilled labor is most important. The market for the equipment is nation-wide or world-wide.

"We are entering an era in which American enterprise is being challenged to protect and to maintain the highest standard of living that we have ever enjoyed as a nation. To maintain and increase our economic strength, American industry has turned in an ever-increasing degree to automatic control instruments—automation—as a means of increasing the output of each individual worker. As a result of this need for automatic control instruments, many small companies are mushrooming in this field. You have as much to offer these companies as you do to us. They, and we, are not seeking free plant sites or freedom from just shares of local taxes. Far more important is the proper business climate in which these small companies can build their organizations and prosper. For obviously, they too are part of the fabric of our country's makeup and as such their economic strength or weakness can benefit, or adversely affect, our economy as a whole.

"On behalf of Milton Roy Company, I gratefully acknowledge the cordial and warm welcome that has been extended to us. We look forward to being among you and to assuming our responsibility in contributing to your future plans and to your growth.

"Thank you."

PORT



ACTIVITY

ALABAMA

Mobile

Tonnage decrease.—Alabama State Docks and Terminals handled only 370,860 tons of traffic in January. A sharp reduction in inbound traffic caused total traffic to drop 40 per cent below the record level of January 1954.

Outbound traffic in January dipped sharply (36 per cent) from December to 99,161 tons but was 71 per cent above January 1954. Outbound traffic was composed of manufactured and miscellaneous products (66.0 per cent), products of mines (24.6 per cent), products of forests (8.6 per cent), products of agriculture (0.6 per cent), and animal products (0.2 per cent). The drop from December in total outbound traffic can be attributed largely to a drop of 73 per cent in the outgoing shipments of products of mines.

Inbound traffic totaled 271,699 tons in January, an amount 28 per cent below December and 52 per cent below the previous January. The drop from last January in inbound traffic was primarily due to a drop in the incoming shipments of products of mines (48 per cent) and manufactured and miscellaneous products (68 per cent).

Port ranks 8 in U. S.—Alabama's only seaport—Mobile—ranked No. 8 in the United States in 1953 in import tonnage, according to John Correll, Business Specialist for the U. S. Department of Commerce, Atlanta Field Office. The only other Gulf or South Atlantic port in the upper ten bracket was New Orleans which ranked sixth, Correll said.

The most recent figures released by the Department of Commerce showed some 3,605,000 long tons of import cargo moving through the Port of Mobile. This compares with 3,910,000 long tons of import cargo handled at the Port of New Orleans.

Correll also announced that dollar value of imports for the January-October, 1954, period was well ahead of the value of imports for the entire year of 1953. The Port of Mobile handled import cargo valued at approximately \$73,500,000 during the first 10 months of the past year while during the entire calendar year 1953 only \$63,000,000 in import value was recorded.

The steady increase in tonnage in the import picture since 1950 at Mobile has

caused new facilities to be added at the port for handling this cargo. The latest development is the new \$350,000 import storage warehouse being constructed at the Alabama State Docks.

FLORIDA

Jacksonville

1954 Tonnage Increase.—Utilities Commissioner J. Dillon Kennedy has reported that the Municipal Docks and Terminals showed a net profit to the city of \$65,653.39 and handled an 18½ per cent increase in net tonnage during 1954.

The profit figure represented net earnings after the payment of all operational costs and an investment of \$101,644.71 in improvements, new equipment and maintenance, Kennedy said.

He added that with additional facilities at the terminal the utility could have handled additional ships and cargoes.

During the past year, Kennedy reported, there were 434,951 tons of cargo handled over the city terminal and 318 vessels docked at its berths.

Improvements paid for out of income included painting and repairing the roofs of warehouses 1 and 2 at a cost of \$5,120; repairs and maintenance of piers 1, 2 and 3, \$39,964.33; dredging berths 4, 7, 8, 13 and 14, \$42,523.30, and the purchase of fork lift trucks and cargo pallets, \$14,017.08.

Multi-million Two-Year Expansion program outlined.—Specific proposals for the expansion of the Municipal Docks and Terminals during the next two years, subject to approval of legislation necessary to provide capital improvement funds, were outlined to the Propeller Club recently by City Commissioner J. Dillon Kennedy. Members of the Duval County delegation to the State Legislature, headed by Senator Fletcher Morgan, added their endorsement and promised full cooperation to get the program underway.

It is generally estimated the expansion work outlined by the Commissioner will cost from \$2,000,000 to \$3,000,000, depending upon the type legislation passed and funds available. A 1¼ mill city levy has been proposed as additional security for a revenue certificate issue.

Most urgent work to be performed, to meet Coast Guard recommendations, would be removal of oil and molasses

pipelines from Pier 3 to a T-head tanker berth north of Pier 1. This would free all of Pier 3 for general cargo operations without restrictions due to tanker operations. At present, two oil and one molasses firms have 96-hour priority for use of the tanker berths on Pier 3.

Funds would also be made available to expedite work begun on Pier 1 during 1954. Last month, MDT General Manager M. C. Dixon reopened Berth 4 on Pier 1 for use by vessels needing open storage space. Additional work on this Pier would put three new berths in service and provide room for erection of additional warehouses.

Construction of additional buildings for long-term storage at waterside is one of the port's immediate needs.

Third item of work outlined by Kennedy would expand Pier 2, which now contains two 1,000-foot long warehouses, one of which is used as a transit shed and the other for storage of coffee and other foodstuffs. The slip between Piers 2 and 3 is over 600 feet wide. It is proposed to narrow this slip by enlargement to Pier 2. Bulkheading and filling on the south side of Pier 2 would open three new berths and provide room for a 1,000 foot long open storage wharf or enclosed warehouse.

LOUISIANA

New Orleans

New Colombia, Panama service.—A new steamship service for the port of New Orleans was announced recently by the Coldemar Line—Colombia Steamship Line—with regular fortnightly sailings between New Orleans, Houston and Mobile and Barranquilla, Cartagena, Buenaventura and Panama Canal ports.

Hansen, Tidemann & Dalton Steamship Co., Inc., New Orleans, have been appointed general U. S. Gulf agents for the new service.

First sailing of Coldemar Line from New Orleans was the S. S. Askild, February 17. The Askild was followed in order by the M. S. Colombia, from New Orleans March 3; the S. S. Askvin, from New Orleans March 17. The M. S. Bolivar will sail from New Orleans March 31. Fortnightly sailings will continue from New Orleans and other Gulf ports thereafter.

Coldemar Line has been in operation from New York, Baltimore, Philadelphia

PORT ACTIVITY

and Jacksonville since 1947, with weekly sailings from these ports to Colombia and the Panama Canal. Eduardo Cuellar of Bogota, is president of the line. General manager is Arturo Garcia Salazar, also of Bogota. The company has its own offices in the major cities of Colombia, including Bogota, Medellin, Cali and the principal ports of the South American republic served by the line. Coldemar also has an office in New York headed by Frank B. Grimes. Agents in the United States are the U. S. Navigation Company, New York, for the North Atlantic; Kaufmann Shipping Company, Jacksonville, Fla., for the South Atlantic, and Hansen, Tidemann & Dalton Steamship Co., Inc., for the Gulf.

MARYLAND

Baltimore

Ore Imports off, iron ore up.—Imports of metallic ores at the Port of Baltimore fell from 10,264,982 long tons in the calendar year 1953 to 9,164,373 tons in 1954, a recent Bureau study reveals.

Based on official figures published by the Bureau of the Census, Department of Commerce, 1954 iron ore imports at the Port aggregated 6,966,997 tons, an increase of slightly more than 65,000 tons over the volume discharged here in the previous year. On the other hand, manganese ore arriving at Baltimore last year amounted to 1,495,386 tons, a drop of 782,254 tons, contrasted with tonnages in 1953, while the 701,990 tons of chrome ore unloaded at local piers in 1954 declined 383,478 tons.

Coal Exports Increase.—Export coal shipments at the Port of Baltimore in February amounted to 66,505 tons on eight vessels, local coal pier operators report.

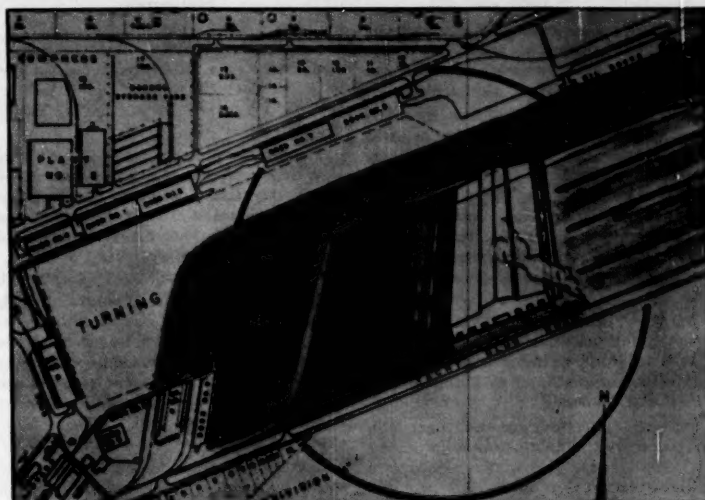
Last month's volume of coal traffic was 32,286 tons in excess of overseas shipments in January and 19,889 tons over exports in February, 1954. Of the February total, 19,288 tons were destined for Yugoslavia, 12,866 tons for Japan, 10,454 tons for the Netherlands, 9,779 tons for the United Kingdom, 8,099 tons for Belgium and 6,019 tons for Greece.

In the first two months of 1955, 100,724 tons of coal were loaded aboard vessels at the Port for shipment abroad. This volume compares with shipments of 88,451 tons in the same period of last year.

NORTH CAROLINA

Morehead City and Wilmington

Cargo Tonnage Increase.—"Cargo tonnages through the North Carolina State Ports for the last seventy days exceed the amount handled during the first six



MAMMOTH DOCK AT BROWNSVILLE, TEXAS. To be built during 1955. The initial unit (emphasized in black), will consist of a 600 by 1,000-foot reinforced concrete dock providing for three additional ship berths.

months of 1954," said Col. Richard S. Marr, Executive Director of the State Ports Authority.

For the second time in one week the State Docks enjoyed capacity business. The modern wharf was filled with three ships, one loading North Carolina products such as pine logs for Holland, wood pulp for England, Germany, and Belgium. Another ship is unloading a full cargo of Cal-Nitro. This fertilizer from West Germany arrived here for distribution to the agricultural industry of North and South Carolina and other bordering states. Down the wharf is a third ship loading scrap metals for export to Europe, much of which returns as agricultural hardware for use in the state.

Col. Marr said, "Since the docks were dedicated this is the first time that three ships have been moored at the 1500-foot wharf, and it is gratifying to have two such events happen in one week. From all sources of information, gathered from various industries now bringing cargoes through the docks, and from others who contemplate shipping through North Carolina ports, we can look forward to many more such busy shipping days at our North Carolina State Docks.

"Agricultural hardware imports into North Carolina and bordering states are also on the increase through the State Docks at Wilmington," said Marr. "The reasons for these additional tonnages of hardware commodities for the farmers of the Tar Heel State, Tennessee, Kentucky and Virginia are the economy resulting from scheduled sailing from Europe."

The State Terminal at Morehead City also was the scene of increasing activities. Many new records were set with the increased numbers of military ships

using the docks during the last few weeks. Tobacco for shipment to European countries is arriving daily at the terminal, fertilizer for the agricultural industries of the Carolinas and bordering states is being bagged and shipped inland by rail and truck carriers.

A cargo of fish oil for Germany was shipped directly, for the first time, out of North Carolina through the terminals at Morehead City. Petroleum and asphalt products tonnages have been continuously increasing with a possibility of setting a new 1955 record for the Morehead City State Terminals.

SOUTH CAROLINA

Charleston

Governor points out value of Bushy Park to Port.—South Carolina's Governor Timmerman has thrown the spotlight on the port of Charleston's great new attraction for industry, the Bushy Park industrial water project.

The governor, who has declared a strong policy of port and industrial development, made an on-the-spot inspection of the site of the project which will provide the greatest supply of soft, fresh water for industry, with easy effluent disposal, of any seacoast location in the country.

Preliminary work has already started on the undertaking which will furnish a potential 10 billion gallons of water a day to ideal industrial sites with access to ocean shipping.

After inspecting the project, which he termed a "tremendous potential for industry," the governor pointed up the

(Continued on next page)

PORT ACTIVITY

(Continued from page 39)

vital link between the project and the port by debarking at the State Ports Authority docks where he observed freighters loading and discharging.

Mayor William McG. Morrison, chairman of the Bushy Park Authority, was host to the governor, along with state and civic leaders.

Third customs office opened.—Increased shipping activity through the port of Charleston has necessitated the opening of a second branch customs office.

Gustav F. Doscher, Jr., U. S. Collector of Customs for the Charleston district, said that with three customs stations better service to shippers and shipping companies can be rendered.

Customs collections for the Charleston district soared to an all-time high during the past calendar year with a record gain of almost 50 per cent over 1953.

Mr. Doscher reported \$3,992,779 in duties collected during 1954, \$1,218,834 more than during 1953, and topping all previous highs.

Export declarations totaled 18,212 as compared with 11,204 in 1953, a gain of 6,908 for the district. Charleston, as the principal port of entry accounted for 17,589 of the export declarations.

TEXAS

Brownsville

Fifty per cent expansion of storage facilities.—Port of Brownsville is planning a program of expansion that will increase waterfront storage 50 per cent. Port Director F. W. Hofmotel announced Saturday.

The program is for the immediate future, he said, and will be handled entirely by revenue financing rather than tax bonds.

Estimated cost of the immediate expansion is \$3,000,000.

The expansion will keep pace with the increased business handled by the port, amounting to a 42 per cent jump in tonnage in 1954 over 1953, from 1,069,541 tons to 1,458,000 tons.

Two projects constitute the main part of the immediate expansion. The first, and smaller, will be a wharf shed on the present open Dock No. 8, at the northeast corner of the turning basin. This is expected to be completed in time for the next cotton season.

The big project is a huge dock structure 600 by 1,000 feet where the shrimp slip used to be, in the southeast corner of the turning basin.

Financing of the project will be handled by pledging only the net revenues of the district, Mr. Hofmotel stated.

Harlingen

New grain elevator.—Construction is under way on a 400,000-bushel grain elevator at Port Harlingen, and it will be providing a market or storage for Valley grain in April.

The big elevator, the very latest in design and equipment, is being erected by the Valley Grain Elevator Co., a partnership composed of J. M. Ferguson and John C. (Jack) Fett of Harlingen, and O. C. Easter of San Francisco, a veteran West Coast grain man.

The elevator, which will handle all varieties of Valley grain, mostly milo, is located on a 10-acre tract leased from the Arroyo Colorado Navigation commission for 50 years, with a 50-year renewal option. The tract provides ample room for handling truck and rail traffic and for expansion.

It is bounded on the north, west and south by paved roads, and construction has started on a 1,300-foot railroad spur from the Southern Pacific main line. A belt conveyor system is planned to carry grain to the wharf for loading barges in Port Harlingen.

Initial construction cost is estimated at about \$350,000, with the elevator having 25 bins for grain, 10 of them the big cylindrical type and the rest interstice bins, all towering 132 feet into the air. The "head house" over the bins will add another 40 feet, bringing the elevator to an over-all height of 172 feet.

The bins are of slip-form steel and concrete construction, and loading, elevating and conveying equipment being installed is adequate for a 1,000,000-bushel eleva-

tor, according to officials of the Ryan Construction Co. of Omaha, the contractors.

VIRGINIA

Norfolk

Four new direct steamship services.—Four new direct steamship services for the Port of Norfolk have been announced: 1) American Export's "Four Aces" express run to Mediterranean ports. 2) Alcoa's fast freight from Norfolk fortnightly to Venezuela. 3) Alcoa's two-way service to Bermuda.

The fourth, Norfolk's new "hometown" service to and from the Caribbean, saw Virginia Trading and Shipping Corporation, announce its new schedule. Next dates from Norfolk to Caribbean ports: March 17 and April 24.

Norfolk Port Authority Has New Publicity Director.—Guy Wilkins, maritime reporter for the Norfolk Virginian-Pilot was named publicity director of the Norfolk Port Authority, succeeding Robert J. McBride, who has joined the Detroit Free Press promotion staff.

February Boom Month for Coal—Other Cargo.—Coal shipments, which had exporters at their busiest in two years, jumped a million tons over February, 1954, totalling 2,569,592 net tons. (Figures of Hampton Roads Maritime Association.) The promise for March: even more!

Ship arrivals, reflecting increases in general cargo movements, also outstripped last year's—538 arrivals were 120 more than February, 1954.



British-built Fordson tractor being unloaded at the Port of Norfolk from the U. S. Line's freighter, SS American Planter. Increasing tractor imports are expected.

SOUTHERNERS AT WORK

Pres. U. S. Chamber

A. Boyd Campbell of Jackson, Miss., last week was elected the 28th President of the National Chamber.

Mr. Campbell, Chairman of the Board of the Mississippi School Supply Company, was elected by the Board of Directors for a one-year term beginning May 3.

The President-elect has been a director of the National Chamber since 1949. He is presently a Vice President, representing the Southeastern Division, and is the chairman of the Policy and Education Committees.

Clem D. Johnston of Roanoke, Va., who will retire as President on May 3, was elected Chairman of the Board.

Richard L. Bowditch of Boston, Mass., Chairman of the Board of C. H. Sprague & Son Company, who is now Chairman of the Chamber's Board, was elected Chairman of the Executive Committee. Mr. Bowditch will succeed Laurence F. Lee, President of Peninsular Life Insurance Company, Jacksonville, Fla.

A. Boyd Campbell, newly-elected president of the Chamber of Commerce of the United States, has always emphasized the "moral accountability" of business.

"Free enterprise is a stewardship," he says. "To retain leadership, it must maintain a climate in which moral and spiritual values are dominant."

"That's true even on grounds of commercial expediency alone. As community leaders, businessmen must face growing responsibilities in community improvement, community welfare, and in character building."

Such views undoubtedly explain Mr. Campbell's outstanding record of community service.

As chairman of the Board of Stewards in his Jackson church, he started a building program which resulted in one of Mississippi's finest church plants.

In chamber work for more than 35 years, he's a former president of the Jackson chamber. In the National Chamber, he's been a director since 1949, a vice president since April 1954, chairman of the Education Committee since 1950, and is also chairman of the Policy Committee.

Mr. Campbell's views on moral accountability explain more than his civic record. They are also the key to his personality. Friends say that his dominant characteristics are humility and a deep sense of obligation.

These qualities appear in his modesty, friendliness and consideration for others. Big, handsome and distinguished in appearance, Mr. Campbell is quiet and deferential in manner.

His own business career is proof there's opportunity in competitive enterprise. He refers to himself as a "small businessman

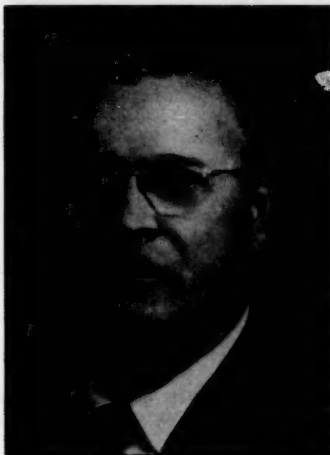
and a typical product of the free enterprise system."

To the young, he says: "The qualities for success don't change. It still requires the will to do, the willingness to pay the price in long hours of work. Above all, do the thing you most want to do. And don't ever forget that security is not to be had by statute or contract. It is something within you."

Georgia Marble Elects John W. Dent President

James R. Cowan, president and executive head since 1941 of The Georgia Marble Company, has been elevated to the position of chairman of the board.

Also announced was the election of John W. Dent as president of the com-



John W. Dent

pany, said to be the largest marble company in the world.

Two new directors also have been named. They are Frank C. Owens, president of Draper-Owens Company, Atlanta realtors, and Mrs. Margaret Tate Benton of Monticello.

The Marble Company has just renewed its lease, beginning in 1959, on the S. C. Tate Estate properties in and near Tate for another 25 years. The original lease by members of the Tate family was made to the Company in 1884, and has been renewed twice before.

At the end of the new lease, the total lease terms will have run for 100 years from the same family to the same company.

The Georgia Marble Company has in the past few years greatly expanded its operations. Its business is now at the rate of 10 million dollars annually. The stock of the company is largely owned and con-

trolled in Atlanta. The company has plants in Tate, Nelson, Marble Hill and White Stone, Georgia; Knoxville, Tennessee; St. Genevieve, Missouri; Russellville, Alabama, and Rutland, Vermont.

Jonsson Elected Director Republic National Bank of Dallas

Election of J. E. Jonsson, president of Texas Instruments, Inc., Dallas, as a member of the Board of Directors of the Republic National Bank of Dallas was announced recently by Karl Hoblitzelle, Chairman of the Board, and Fred F. Florence, president of the Bank.

A native of New York, Mr. Johnson's first experience in the field of industry was that of working summers in a munitions plant at Montclair, N. J., making British shells for use in World War I.

Mr. Johnson is a member of the Society for Exploration Geophysicists; the American Association for Petroleum Geologists; the American Management Association; the American Ordnance Association, and of the American Necromen Society. In 1949, he served as president of the Dallas Petroleum Club.

He is also a director of the Community Chest of Dallas and is chairman of the Advisory Committee, Dallas Pilot Institute for the Deaf. He serves as vice-chairman of the Board of Directors of Hockaday School.

Zimmerman Named Director Kentucky Industrial Development

James C. Zimmerman, Henderson, Ky., was named Director of Industrial Development of the Kentucky Chamber of Commerce.

He has resigned his position as general office manager of Spencer Chemical Company's Henderson plant and assumed the Kentucky Chamber directorship on March 1, according to KCC Executive Vice President Harper Gatton. Gatton said Zimmerman was selected from among several applicants by KCC's Executive Committee, which met here recently.

Zimmerman replaces Walter B. Koch, who resigned the KCC position on February 1 to become executive director of an industrial development association in Monroe, La.

Southern Wheel Names Salter First Vice President

Roy L. Salter has been appointed first vice-president of the Southern Wheel Division of American Brake Shoe Company.

Formerly vice-president of the Southern Wheel Division, Mr. Salter has been (Continued on next page)

Southerners

(Continued from page 41)

with the company since 1924. He has been associated with the Wheel Division in production and administrative capacities. He was appointed vice-president in charge of operation in 1946.

A native of Alabama, Mr. Salter is a graduate of Alabama Polytechnic Institute. He will continue to be located at division headquarters in New York.

W. H. Mims New Superintendent For Central of Georgia Railway

William Henry Mims is the new superintendent of motive power and equipment for the Central of Georgia Railway, Savannah, Ga.

He succeeds Harvey Edward Hales who has accepted the position of chief mechanical officer of the New York, New Haven and Hartford Railroad in New Haven, Conn.

The new Central superintendent is a native of Beatrice, Ala., and is an elec-



William H. Mims

trical engineering graduate of Alabama Polytechnic Institute, Auburn, Ala. He joined the Central of Georgia as assistant shop engineer, Macon, Ga., February 1944. In June of the same year he was promoted to shop engineer and in December 1946 was transferred to Savannah as assistant mechanical engineer. A year later, in January 1948, he was appointed assistant general foreman of the Central's Savannah shops, and in January 1949 was promoted to electrical engineer, the position he has held until now.

Westinghouse Air Arm Division Names Clark to Electronic Post

Trevor Clark, internationally experienced electronic development expert, has been appointed assistant to the engineering manager of Westinghouse Electric Corporation's air arm division in Balti-

more, according to an announcement by Dr. S. W. Herwald, engineering manager.

Mr. Clark, prior to his present appointment, was associate director of Southwest Research Institute in San Antonio, Texas.

A native of Haviland, Kans., Mr. Clark was graduated in 1930 from Friends University, Wichita, receiving his Masters degree from the University of Michigan in 1933. He entered the industrial electronics field in 1934 to conduct research on microwave and photoelectric tubes.

Basic-Witz Appoints Smith, Southern Sales Manager

Appointment of Newton C. Smith to the executive staff of Basic-Witz Furniture Industries, Inc., of Waynesboro, Va., to serve as Southern sales manager has been announced by E. M. Bonfoey, president of Basic-Witz.

Mr. Smith has been representing the company in Tennessee and Kentucky during the past year. In his new capacity he will have supervision over sales in Florida, North Carolina, South Carolina, Mississippi, Alabama, Louisiana, Texas, Georgia, Tennessee and Kentucky. Prior to joining Basic-Witz, Mr. Smith served with International Furniture Company as their southern sales manager.

The recent sales appointment follows a general program of expansion for Basic-Witz. President Bonfoey recently gave the go ahead for an addition to the Staunton plant, which upon completion will step up production some 25 per cent, plus providing for complete conveyerizing of the finishing and rubbing room, plus the addition of new rough-end equipment.

C. E. Meluney, Jr., Appointed Houston District Sales Manager

Charles E. Meluney, Jr., has been appointed Houston District Sales Manager for the Electrical Wire and Cable Division of John A. Roebling's Sons Corporation. The appointment was made known by S. E. Yeaton, General Product Manager of the company, a wholly-owned subsidiary of The Colorado Fuel and Iron Corporation.

Mr. Meluney will have his headquarters at Houston and will be in charge of the division's sales activities covering most of Texas, as well as Oklahoma, Louisiana and Mississippi.

Paul Hansen Heads New Industrial Security Group

Paul Hansen, Director of Security for Reynolds Metals Company, Louisville, Ky., has been elected president of a newly-formed national organization, The American Society for Industrial Security. The election was held at the group's organization meeting at the New Weston Hotel, New York City.

Hansen, a former Federal Bureau of Investigation agent, has been with Reynolds for 11 years.

The purpose of the new organization is

to further the exchange of information and techniques relating to the field of industrial security.

S. N. Bean Elected Chairman Manufacturing Methods Committee

S. N. Bean, chief manufacturing engineer of the Georgia Division, Lockheed Aircraft Corporation at nearby Marietta, has been elected chairman of the Manufacturing Methods Committee of the Aircraft Industries Association of America, at the conclusion of the March 24-25 committee meetings to which Lockheed-Georgia was host.

Bean succeeds B. K. Bucey, Boeing Airplane Company tool design manager, of Seattle, Wash. New vice chairman is Ralph A. Fuhrer, chief tool engineer of the Ft. Worth, Tex., Division of Convair.

The committee decided to launch an industry-wide study-survey project on airplane functional test equipment. Named to coordinate this was W. W. Lampkin, director of manufacturing of Hughes Tool Co.

Southern Minerals Appoints Asplundh As A Director

E. T. Asplundh has been elected a director of Southern Minerals Corporation, an oil and gas producing firm with headquarters at Corpus Christi, Texas.

Mr. Asplundh is president of Columbia-Southern Chemical Corporation, a wholly-owned subsidiary of Pittsburgh Plate Glass Company. He is a director of Pittsburgh Plate Glass Company and vice president in charge of the firm's Cement Division. Mr. Asplundh also is president of Standard Chemical, Limited.

Wheeling Steel Appoints Cox Assistant General Manager

Announcement has been made of the appointment of T. J. Cox as Assistant General Manager of Wheeling Steel Corporation's Ackermann Factory located in Wheeling, West Virginia. The appointment was effective March 1st.

Cox has been a member of the industrial relations staff of Wheeling Steel since 1941 and is prominent in education and athletic circles throughout the country, having been an All-American in football under coach Bernie Bierman at the University of Minnesota and later serving as Tulane University's head football coach.

Turner Construction Company Elects O'Connell a Director

The election of N. B. O'Connell as a director of Turner Construction Company was announced recently by H. C. Turner, Jr., president.

Mr. O'Connell has been with Turner since 1920 and was elected a vice president in 1952.

Stopwatch Support Fits Hand

Andrew Technical Supply Co., 6972 N. Clark St., Chicago 26, Ill.—To prevent damage to costly stop-watches used in science and industry, due to handling with wet, dirty, oily or greasy hands, a practical stopwatch holder is now available from the company. The unique feature of the "Guardsman" support is that it does not interfere in any way with operating the watch when it is held in the hand.

For further safe-guarding the watch against damage if the watch is dropped accidentally, the support has a rubber



Stopwatch holder.

cushioning ring. To resist corrosion, the support is finished in Hammerloid. Its entire surface cleans easily. Three set-screws hold the watch in place. When placed on a desk or bench, the support holds the watch at an angle for easy reading.

New Epoxy Coatings

Dennis Chemical Company, St. Louis, Missouri, announces the development of Perma-skin epoxy coatings, based upon the use of catalysts to provide, in an air-dry system, properties previously obtainable only with high-temperature baking. This permits coating of items too large or otherwise impractical to bake, such as chemical process equipment, water towers, and tanks.

These coatings are excellent, according to the firm, for protection of floors against heavy traffic and corrosive spillage.

One Gallon Tight Head Drum

Vulcan Tamping and Mfg. Co., P. O. Box 161, Bellwood, Ill.—Now available from stock in small or large quantities is the new Vulcan 1-gallon tight head drum incorporating all the up-to-date features of standard-size containers.

Answering the demand for smaller, easier-to-handle shipping and dispensing containers, this 1-gallon drum will be available with either a regular interior

coating or a hi-bake lining for dangerous and "hard-to-hold" products. The 1-gallon drum meets the demand for shipment of products where smaller quantities are required as in agriculture, laboratories or numerous departments within a company—eliminates wasteful refilling which is oftentimes dangerous and a fire hazard.

The new Vulcan drum is a sturdy, standard ICC-17E container, round in shape with welded side seams and double-seamed ends. The top is necked in to provide for convenient stable stacking, and has a carrying handle and recessed 45 mm. screw cap—pouring spouts, either plastic or metal, available. The interior of the drum has a successful non-toxic, chemical resistant hi-bake lining, with additional interior linings for other products supplied upon individual requirements, packed in cartons.

Circular Saw Grinder

Foley Manufacturing Co., Dept. 60, Minneapolis 18, Minn.—The new Model 3140 Foley Grinder provides circular saw users a dependable unit for sharpening all types of circular saws—rip, crosscut or combination toothed—from 5" to 44" in diameter.

The new grinder is equally suited for maintenance purposes by circular saw users and for service shops doing custom filing. Positive settings provide correct pitch on all teeth as well as uniform tooth height, depth and bevel. Saw tilts to 45° both ways for bevel grinding.

Pointer and graduated quadrant scales insure quick and accurate positioning. Firmly anchored saw support insures grinding accuracy, prevents vibration. Model 3140 Foley Grinder meets all safety standards, including emery wheel guards.

High speed 1/3 H.P. motor has lifetime lubricating ball bearings.

Four-Inch Submersible Pumps

Sumo Pumps, Inc., Stamford, Conn.—Two new high-capacity 4" submersible water supply pumps, designated the Model B3S Series, have been developed by the company.

Developed for use in 4" or larger wells, the new B3S Units are available with 1 hp or 1½ hp motors. Their design gives them unusually high capacities and efficiencies, the company says. Capacities range up to 1,800 gallons per hour and heads as high as 360 feet, which enables them to be used for almost any domestic, farm, commercial or light industrial requirement.

Bronze and stainless steel is used throughout. The simplicity of the pump construction permits all disassembly, inspection and servicing operations to be performed in the field using only a wrench and screwdriver. The pumps are shipped complete, ready for installation

with control box and a specially designed cable splice which permits the pump cable to be spliced to the under-water cable in the field.

Flexible Industrial Fixture

Gibson Manufacturing Company, 1919 Piedmont Circle, N.E., Atlanta, Georgia.

—A completely new concept of industrial fixture design has been announced. The new fixture, designated the Ortho-88 Industrial, is mounted on a Uni-Race channel, sections of which are furnished as part of the fixture. Uni-Race sections are joined to provide an unbroken, open wire-way any desired length, from a few feet to several hundred feet. The special design of the Uni-Race insures perfect alignment, exact fixture spacing and a fixed power source for each fixture through receptacles mounted at fixed intervals.

After the Uni-Race has been installed, fixtures may be mounted without the use of tools, in continuous runs or at spaced intervals. They may be quickly and easily moved from place to place as conditions demand, without the use of tools, without further electrical work, and without interrupting service to other fixtures on the circuit.

Contractors report that the new fixture can be installed at savings up to 50%, with a savings in equipment cost alone of 15%-25%. Installation is accomplished without expensive "extra" accessories but fixture is said to have greater flexibility than is possible with any known combination of industrial fixtures and accessories. Design of the new Ortho-88 Industrial provides 30° lateral shielding and 22% up light with 83% overall efficiency.

Air Conditioned Test Cabinet

Niagara Blower Company, 405 Lexington Ave., New York 17, N. Y.—Announces a new, completely air conditioned test cabinet to provide full control of relative humidity and temperature for testing materials, products or specimens. The method used is that of saturating air at the required dew-point temperature and reheating to the desired dry-bulb temperature. The control of relative humidity to close tolerances is given in the range of 5% to 95%. The dry-bulb temperature at which this control is provided will depend on the collateral services afforded. With simply water and electric power the top of the range is approximately 150°F and the low limit depends on available water temperature.

When refrigeration is provided, Niagara "No Frost" liquid may be used in the spray water and the dew point temperature may be taken as low as minus 30°F with a corresponding lowering of

(Continued on next page)

NEW PRODUCTS

(Continued from page 43)
the dry-bulb temperature at which low humidities can be produced. No moisture-sensitive instruments are required to achieve and hold the control and recording instruments may be used.

The test cabinet dimensions are 30" by 28" by 24" clear opening for access of 26" by 22". The air conditioning unit is fully accessible, located in an insulated cabinet. There is also a window for viewing the test material adjoining the test cabinet.

Flush Base Vise

The Columbian Vise & Mfg. Co., Cleveland 4, Ohio—A new Gyro-Vise flush base, which drops level with the work surface when not in use, is announced by the firm.

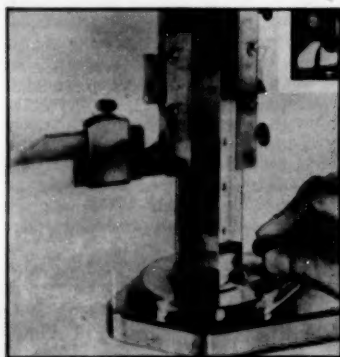
This special base is designed for applications where it is desirable to keep the work bench or other surface free of obstacles at times when the vise is not needed. By loosening a set screw on the side of the base, the post drops down level with the surface. It is held there by a retaining rod.

The new base is said to greatly increase the usefulness of Gyro-Vises.

The latter operate from—and rotate around—the base, standing upright or laying flat on either side. They turn in a full circle and lock automatically in any desired position when jaws are tightening.

Triangular Height Gage

George Scherr Co., Inc., 200 Lafayette St., New York 12, N. Y.—A distinctly new and differently designed height gage introduced by the company. Their "Chesterman" Height Gage uses a triangular scale beam for superior strength and exceptional rigidity, preventing sway and vibration—a real advantage, particularly for layout and checking of large jigs, fixtures and machine parts. Completely new in design is the sliding head which moves through its entire range by the action of the full-length, large diameter



"Chesterman" Height Gage.

screw in rear of the beam. The engaging nut is split and is disengaged for quick approximate setting of the head by simply pressing the two lugs on the sides and sliding the head along the beam. One of the chief advantages is the location of the fine adjustment screw in the base—an exclusive feature of this gage.

The Vernier is 2.450" long as compared to the 1/2" long vernier commonly found on conventional height gages. Verniers are adjustable and the accuracy of the setting may be checked by use of a master gage block furnished with each Height Gage.

Trench Digging Attachment

The Earl H. Pence Company, Inc., of San Leandro, California, distributors of the Agricat, diminutive and versatile crawler tractor, has announced the addition of another new labor and money saving attachment designed specifically for use with it.

The new attachment, known as the Agrihoe, is a hydraulically-operated backhoe which, according to the manufacturer, converts the Agricat into an amazingly efficient ditch digger.

Overall specifications show that the Agrihoe has a 10-foot reach, can dig to



Hydraulically operated backhoe.

a 6-foot depth, and load to an 8-foot height. It is capable of a variety of digging operations, in addition to being used to great advantage in backfilling or rough grading.

Anti-rust Aluminum Primer

Reynolds Metals Co., Louisville, Ky.—A new rust-inhibitive aluminum pigment has been developed and patented by the company, according to an announcement by David P. Reynolds, vice president in charge of sales, Louisville, Ky.

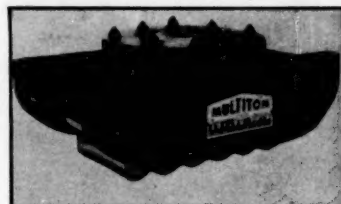
The company will soon market this

new product in the form of a paste made up of strontium chromate and powdered aluminum. It is expected that various paint manufacturers will soon offer paint to the trade, made with this pigment and to this new patented formula.

As is well known, aluminum pigment offers amazingly effective hiding power, reflectivity, and protection to underlying material. However, it has no rust-inhibitive properties. Strontium chromate, on the other hand, possesses outstanding rust-inhibitive properties, especially where salt water exposure is involved.

Heavy Duty Roller Skid

Stokvis-Edera & Co., Inc., of Port Washington, New York, has placed on the market a new, ingenious device known as the Multiton Roller Skid which may well replace the standard tools of the heavy moving trade; i.e., roller bars and pry bars. The development of Multi-



Roller Skid.

ton Roller Skids was the direct result of the company's main business, the sale and installation of metal working machinery of various kinds—and these machines often run to considerable weights. Their skilled installation mechanics and set-up men were often forced to wait for many hours while the rigging crew installed the machinery in place by the slow and cumbersome method of using roller bars.

The Engineering Department was given the task of developing a unit that would cut down on this "down time" for skilled set-up personnel. The requirements were that the dolly be extremely powerful, yet light, so that it could be placed as needed, when needed, and could be easily carried. The specifications also included that the dolly be not of the axle type, which would result in single point wheel contact with the floor.

Out of these requirements the new roller skid was developed. It proved to be so successful and useful in the installation of the company's own machinery, that Stokvis-Edera decided to manufacture and market it.

These roller skids are designed specifically for inordinate weights. The principle is an endless chain composed of heavy steel rollers joined by link courses around the center piece of the frame. The turntable is furnished with gripping "teeth" that inbed themselves into the wooden frame underneath the load, as the load is placed onto two or more of the units. When power is applied to the load, the units move forward, laying the rollers ahead of them, as on a tractor

or military tank. They may also be turned.

Liquid Industrial Herbicide

The Dow Chemical Co., Midland, Mich.—Baron, a nonselective herbicide which brings a new chemical principle to vegetation control, is now available for industrial use, the company has announced. The new product is a liquid which emulsifies readily in water.

For convenience the new chemical has been given the coined common name "erbon." It embodies an important fundamental new chemical characteristic as the basis for its remarkable effectiveness. The material was given extensive field tests last year under the code number M-171. Baron contains four pounds of technical erbon per gallon.

Baron may be sprayed on leaves, which take it up directly; or it may be sprayed on the soil, from which it is taken up by roots. Its translocation from leaves is relatively independent of rainfall moisture.

When applied to the soil it acts as a residual sterilant, lasting for approximately a season, its effective persistence depending upon various factors.

Hydraulic Slide Rule

Frank E. Richardson, Box 612, Shreveport, Louisiana.—A newly developed hydraulic slide rule is now available which can be used as a satisfactory and conservative means of calculating capacities and pressures of products pipelines. The rule will enable any person who is familiar with slide rule operations to determine, within the accuracy of a 10-inch rule, the rate of flow, pressure, diameter or friction factor of the Williams and Hazen formula. It is accurately marked to within two microns of exactness calculated in the formula using seven-place logarithm tables.

Based on the Williams and Hazen formula for water flow, the rule scaling has been adapted for the specific gravity of gasoline. Also, inasmuch as products pipelines handle refined materials with viscosities as great as five and six times that of gasoline, the rule has incorporated into it a viscosity factor wherein the friction factor can be changed to correspond to the kinematic viscosity of the product being pumped. A complete and informative manual covering use and providing a comprehensive reference accompanies the rule.

Eight-Foot Industrial Lights

Sylvania Electric Products, Inc., Wheeling, W. Virginia.—A new line of industrial lighting fixtures using the recently developed high-output, eight-foot, rapid-start fluorescent lamps, has been announced by the firm.

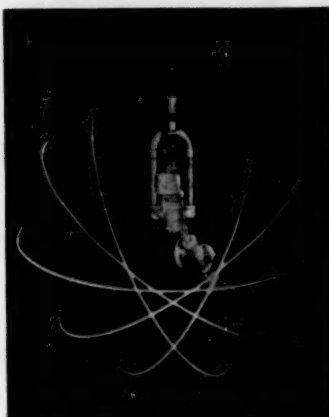
The new fixtures, called the "Industrial King Size" line, provide more light per dollar of cost, according to Thomas G. Hearn, sales manager of Sylvania's lighting fixture department. Since with these new units the number of fixtures can be

reduced, still maintaining the same level of illumination, both initial and operating costs are reduced, Mr. Hearn said.

All-white slotted-reflector units used with the new "King Size" fixtures provide an essential upward component of light to reduce brightness contrasts. The slots serve to make the units more efficient since they not only dissipate heat but also create a chimney effect which carries away accumulations of dust which otherwise would collect on the reflector surface.

Rotating Tank Cleaner

Sellers Injector Corp., 1606M Hamilton St., Phila. 30, Pa.—A new tank cleaner providing three-dimensional rotation of



High pressure tank cleaner.

a high pressure hydraulic jet has been announced. Designated as the Rotor Jet, this compact, lightweight device delivers two powerful streams of hot or cold water, with or without detergents, over the entire inside surface of any shaped tank.

Portability of the Rotor Jet, the firm claims, enables one man to handle the entire tank cleaning operation without assistance. The unit is simply lowered through the tank access by means of its supply hose. Since the unit is completely controlled from outside, there is no need for workmen to enter the tank.

Cleaning speeds are fully adjustable—high speeds for light cleaning or rinse; slow speeds for heavy cleaning give longer hydraulic scrubbing and greater heat transfer to the tank surface. The two jets, powered by a venturi-injector, provide high velocity streams so that a scrubbing rather than cascading action results. The jet head is rotated pneumatically, utilizing all hydraulic power for cleaning; none is lost to rotating power.

The Rotor Jet is available in three models for discharge capacities from 600 to 6,000 gph.

New 7-Inch Standard Sander

The Black & Decker Mfg. Co. of Towson, Md., announces a new 7-inch Standard Sander has been introduced. This tool possesses 20% more power than its predecessor, yet its weight has been reduced by 20%, the company states. Its motor has been redesigned and tailored for the requirements of such a unit and built for general-purpose maintenance and production work.

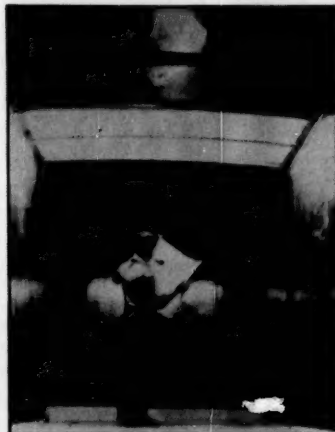
Black & Decker engineers have employed a new type centrifugal fan affording far greater air velocity through the commutator section. This means the motor runs "cool" and is kept almost entirely free of carbon and abrasive dusts.

This new sander possesses superior balance over the previous model; and the handle has been redesigned for a more comfortable grip, according to the firm. The bottom inspection plate is fitted onto the field case in such a manner as to form a seal past which no abrasive materials can filter into the interior of the unit. The control switch is enclosed in a dust-proof compartment; and also is guarded to prevent accidental operation.

The unit has a net weight of 10½ lbs. and an overall length of 17½". The tool is available for either 115 or 220 volt AC or DC operation.

Translucent Skylight For Trucks

Strick Plastics Corp., 31-06 38th Ave., Long Island City 1, N. Y.—A new translucent skylight panel speeds loading and unloading of motor freight by providing for easy reading of shipping labels and loading lists. The skylight is now being



Truck skylight.

produced by the firm for manufacturers of truck bodies and trailers.

Trade-named "Lamilite," the skylighting material offers a unique combination of translucence, strength, workability, and resistance to impact.

(Continued on next page)

NEW PRODUCTS

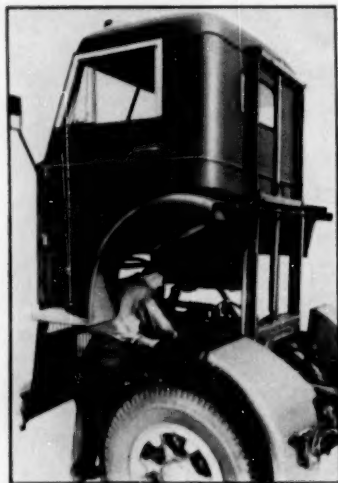
(Continued from page 45)

The manufacturer states that "Lamilite" sheets will transmit 50% of the available light to truck interiors. Panels are easy to seal in position, yet will not crack under the repeated stresses encountered in operation on the road, the company also states. "Lamilite" is considered by Strick engineers to be superior to both wire reinforced glass and ordinary clear plastic materials.

Cab Forward Trucks

Mack Trucks, Inc., 350 Fifth Ave., New York 1, N. Y.—has started production of a radically new cab-over-engine truck series, said to be the most compact in the industry and with a cab that power lifts vertically from the chassis for easy servicing.

Designated as the Verti-Lift D series, these new cab forward Macks are built in truck sizes from 20,000 to 28,000 pounds gross vehicle weight and as tractors in



Vertical-lift truck cab.

the 40,000 to 53,000 pounds gross combination weight range.

The most outstanding feature of the D series is the revolutionary Verti-Lift cab providing maximum engine accessibility. The new cab is said to be the shortest from front to back in its class, permitting greater body length along with excellent driver comfort.

The new models, utilizing widest front axles and large steering wheels, are easily handled, the company states, in heavy traffic and tight places. As an illustration of its great maneuverability, the D will turn in a circle 34 feet in diameter with models having a cab-to-rear-axle dimension of 81½" and using 9:00x20 tires. All controls are of simple conventional type located for driver convenience.

Portable Lamp Guard

McGill Manufacturing Co., Inc., Electrical Division, Valparaiso, Ind.—New portable lamp guards have been designed for greater durability and adaptability in industrial uses. Available with handles of rubber, phenolic or wood, the new models have eye-appeal as well as utility. Giving light with flood and spot characteristics, they throw the right amount of light where it is needed, according to the company.

The back of the long life lamp is silvered and extra-heavy steel wires form a sturdy protective cage. The steel wires are electrically welded and heavily zinc-plated. Light-weight enough to be held easily, the portable models also stay put when they are set on a flat surface.

Portable Wire Stitcher

Acme Steel Co., 2840 Archer Ave., Chicago 8, Ill.—A new arm-type wire stitcher made portable by the use of an aluminum frame which reduces the weight to 59 pounds—about one-third that of former stitchers of this type—is now available to packagers.

According to the company, the Acme-Champion Model K table-top stitcher affords new operating flexibility in closing bags of cellophane, single or multi-wall kraft paper, plastic, aluminum foil or waxed paper, in attaching bags to cards, assembling light chipboard boxes or fastening labels to merchandise.

Drawing round wire from a continuous-length, five-pound reel, the stitcher cuts it to proper length, forms stitches and clinches them at 200 per minute in material up to ¼" thick. The machine—which has a 1/20 h.p. fan-cooled motor—is actuated by an electric foot switch which the operator may place in any convenient location.

Bottle Stopper Clamp

Central Scientific Co., 1700 Irving Park Rd., Chicago, Ill.—A new clamp, designed to hold rubber stoppers firmly in place in large storage bottles and prevent the stoppers from popping out, has been developed by the company for use on 5-gallon or other size bottles that take a 2½ inch stopper.

Cast from aluminum for strength and light weight, the Cenco Bottle Stopper Clamp consists of a U-shaped yoke, measuring 3 inches from tip to tip, with a pillar at the base from which a hinged arm extends over the center of the stopper. An adjustment screw at the top of the pillar forces the arm downward on the stopper to hold it firmly in the neck of the bottle.

The wide surface of the yoke provides a secure clamp beneath the rim of the bottle neck. When clamped in center, the stopper is forced against the neck with

perfect uniformity and "popping" of stopper is positively eliminated, the company states.

Fluted Welding Cable

United States Rubber Co., Rockefeller Center, New York 20, N. Y.—A fluted welding cable which is said to be long wearing on all types of welding equipment and has greater impact resistance than even special cable constructions, has been developed it was announced.

The new cable, called U. S. Royal Gold Welding Cable, is light and unusually flexible. This makes it easier to weld in cramped quarters, cuts down "drag" and reduces operator fatigue, the manufacturer states. The unique fluted jacket is supposed to give a better grip and is cooler to handle, since its greater surface area dissipates heat faster than conventional round welding cable.

Moisture Determining Balance

The Torsion Balance Company, Clifton, N. J.—An improved and redesigned balance for moisture determination has been announced by the company.

The new balance, known as Model DB-5, has a single calibrated stainless steel beam and a vernier slide weight, with coarse and fine adjustments, which allows the accurate determination of moisture in a 10 gm. sample, from 0.1% to 100%.

Two additional slide weights are provided; one weight provides for the taring of containers weighing up to 45 gm., the second slide weight may be positioned to tare 2, 5 or 10 gm. sample weights. These features, the company states, plus the addition of an improved oil damper, result in quicker moisture determinations, and without the use of loose weights.

Expanded Jib Crane Line

Abell-Howe Co., 53 W. Jackson Blvd., Chicago 4, Ill.—The company announces that its newly expanded line of jib cranes provides "a standard model for most every special application."

A new catalog just released depicts eight of the more popular types. The complete line includes jib cranes for various types of mounting and headroom conditions. All are equipped with anti-friction bearings, which the company claims, assures effortless handling under full load.

Portable Electric Plant

Multi-Matic Corporation of Van Nuys, California, is introducing the most complete line of portable electric plants manufactured by a single company, they claim.

Called the Gen-A-Matic, this line of portable electric plants includes 22 models in all, ranging from 275 and 500 watts, 6 and 12 volts to 4,000 watt, 120 volt models. Both AC and DC models are manufactured—with operating speeds ranging from 2800 to 3600 rpms.



The Telephone Pole That Became a Memorial

The cottage on Lincoln Street in Portland, Oregon, is shaded by graceful trees and covered with ivy.

Many years ago, A. H. Feldman and his wife remodeled the house to fit their dreams ...and set out slips of ivy around it. And when their son, Danny, came along, he, too, liked to watch things grow. One day, when he was only nine, he took a handful of ivy slips and planted them at the base of the telephone pole in front of the house.

Time passed ...and the ivy grew, climbing to the top of the pole. Like the ivy, Danny grew too. He finished high school, went to college. The war came along before he finished—and Danny went overseas. And there he gave his life for his country.

Not very long ago the overhead telephone lines were being removed from the poles on Lincoln Street. The ivy-covered telephone pole in front of the Feldman home was about to be taken down. Its work was done.

But, when the telephone crew arrived, Mrs. Feldman came out to meet them. "Couldn't it be left standing?" she asked. And then she told them about her son.

So the pole, although no longer needed, wasn't touched at all. At the request of the telephone company, the Portland City Council passed a special ordinance permitting the company to leave it standing. And there it is today, mantled in ivy, a living memorial to Sergeant Danny Feldman.

BELL TELEPHONE SYSTEM





Free delivery of water to drought stricken farmers is an example of the varied service and aid Citizens & Southern Bank gives its customers.

Citizens & Southern Bank Inaugurates Many New Services

More new ways to make banking useful to people were developed by The Citizens & Southern National Bank in 1954 than in any year in its 67-year history, C&S President Mills B. Lane said in a recent report.

In remarks prepared for the annual stockholders' meeting at Savannah, Mr. Lane described C&S's banking service as the highlight of the year. Services ranged from an installment buying plan for stocks and bonds to a full-scale program for assisting the growth of the sheep industry in Georgia.

Among C&S firsts, Mr. Lane mentioned the C&S Freight Payment Plan under which 400 Atlanta business firms now save money paying freight bills to 45 carriers with a rubber stamp instead of a check.

Other C&S developments during 1954 included a financing plan for irrigation equipment; a C&S-administered profit-sharing plan for small and medium size banks; a new method for cutting overhead costs on checking account book-keeping; and development of a new travel finance plan.

Older services first introduced in this area by the C&S grew in usefulness during the year, Mr. Lane said. During 1954, for example, the C&S Industrial Development Department helped 28 business concerns establish new factories, warehouses or sales headquarters in the state, he said.

At the end of the year, the C&S reached an all-time high in the number of its deposit customers with record deposits of \$465 million, an advance of \$41 million over last year, Mr. Lane reported.

The investment of stockholders in C&S Banks increased \$4.3 million to a new high of \$30.1 million, Mr. Lane said.

The Citizens & Southern National Bank and its affiliates have 22 offices in Atlanta, Augusta, Macon, Savannah, Athens, Valdosta, Buckhead, Avondale Estates, Emory University, East Point, Thomaston, Dublin, LaGrange, Albany and Newnan. The banks at Newnan and Avondale Estates affiliated with C&S during the year.

Huge Plastic Bag Plant Slated for Simpsonville, S. C.

Purchase of 200 acres of land at Simpsonville, S. C., for construction of its third plant to manufacture Cryovac plastic bags for packaging meats, poultry and cheese was announced by Bradley Dewey, Jr., vice president of Cryovac, of the Dewey and Almy Chemical Company, division of W. R. Grace and Company.

The new Cryovac plant will be located just off Route 276 about 12 miles south of Greenville, adjoining Simpsonville. It is expected to be in operation by mid-summer and will employ 300 to 400 men and women from the Greenville area, Edward F. Beyer, Jr., who will manage the plant, said.

Daniel Construction Company, builders, start work on the plant immediately. Cost of the plant was not announced, but it was understood that by the time it is in operation it will represent a multi-million-dollar investment.

The item to be packaged is placed in a Cryovac bag, which is made from a special Dewey and Almy-Dow Saran. Air is then withdrawn by a vacuum, the neck of the bag is twisted and sealed with a metal clip. A quick dip in hot water at about 200 F. causes the plastic to shrink and fit like a second skin.

Greenville was selected for the plant's location primarily because of the South's overall economic growth, which is making it an increasingly important market for Cryovac bags, particularly among packers of poultry and smoked meats, Mr. Beyer added.

Other reasons affecting the decision to locate in South Carolina, Mr. Beyer said, was the fact that the mild climate not only made immediate construction possible, but also decreased the cost, since there was no need for protection against wide temperature changes. Proximity of good ocean port facilities at Charleston for supplying a growing export market, abundant water supply and good living conditions also were important factors, said Mr. Beyer.

Establishment of this plant, he continued, will enable Cryovac to supply its growing Southeastern market and augment the production of plants at Lockport, New York, and Cedar Rapids, Ia. Bags are also made at Toronto, Canada, and Melbourne, Australia.

The plant will be of modern, one-story construction, will cover more than 100,000 feet, and is designed for future expansion.

Henry L. Kennedy, AIA, manager of Dewey and Almy's construction products division, is the architect.

(See *Industrial Expansion*, March, 1955)

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CITY AND STATE

Robert Gair Co. Propose Purchase of Two Southern Firms

Directors of Robert Gair Co. have approved agreements under which the company will acquire Southern Advance Bag & Paper Co., and Great Southern Box Co. Both agreements, will be voted on at Gair's annual meeting in New York on April 21. They provide for an exchange of Gair stock for the shares of companies it will acquire. Each agreement is also subject to approval by stockholders of the company being acquired.

Southern Advance Bag & Paper Co., with executive offices in Boston, operates at Hodge, La., a pulp mill, kraft paper mill, and bag plant with a daily capacity of approximately 350 tons.

The company owns in fee more than 163,000 acres of timberlands in Louisiana and Arkansas, and holds extensive mineral rights in connection with this acreage, including interest in a number of gas wells. It also holds 99-year leases which entitle it to cut timber on an addition 65,000 acres, and as these leases were acquired on a lump-sum basis, no further rental payments are required.

A wholly-owned railroad subsidiary, the North Louisiana & Gulf Railroad Co., operates 40 miles of track through the parent company's timber properties and connects with the Rock Island Railroad on the east and the Illinois Central on the west.

The Great Southern Box Co., in New Orleans, has two wholly-owned subsidiaries located in Jackson and Magnolia, Miss., respectively. Great Southern and its subsidiaries had total sales of approximately \$10 million last year.

Great Southern's principal product is corrugated shipping containers, manufactured in New Orleans and Jackson. Within the past year, a new plant for the fabrication of wire-bound wooden boxes has been constructed at Magnolia. This wirebound box manufacture was previously conducted in New Orleans. A second plant at Jackson also manufactures cleated shipping boxes.

Winder Aircraft Corp. Plans Expansion at Tifton, Georgia

The Winder Aircraft Corporation of Winder, Georgia, announced that it has acquired a large tract of land at Tifton, Georgia, and will build a new and modern

manufacturing plant in this growing and progressive south Georgia town.

The firm will move its entire facility, in the very near future, into the new plant, and in the meantime, has leased a temporary building in Tifton, where limited scale operations will proceed until the new plant is completed.

The aircraft firm has current electronic manufacturing contracts with the Armed Forces, and will broaden and enlarge its activities in Tifton, where it will manufacture navigational equipment of a complex nature, for both military and commercial usage.

Mr. A. W. McCaghen, who has been Factory Manager at Winder, will be transferred as Factory Manager of the new plant at Tifton, Georgia.

'Electronic Brain' Will Affect Office and Top Management

"The 'electronic brain' will not only revolutionize office methods," say Eugene J. Bengé, Asheville, N. C., management engineer, "it will have a profound effect on all top management."

Digital computers are not only for the giant corporations. One recent model can be operated with one person, yet might turn out as much as six clerks. In billing, for example, the equipment is connected to one or more electric typewriters. In one operation it can prepare the bill, a bill register, a stock slip and shipping tags—and punch a new card to boot!

"So far," Bengé says, "management thinks of the computer as a means to slash clerical payrolls. But more important benefits are likely to result from better and quicker information to managements, closer scheduling of production, reduced inventories and extended operations' research."

Bengé, 1954 recipient of an award from the Society for Advancement of Management, warned that no management dare ignore the digital computer.

Limestone Quarry to Open In Lynchburg, Va., Area

A Roanoke firm will open a new quarry on the Norfolk and Western Railway seven miles east of Lynchburg at an outlay estimated at \$250,000.

A spokesman for the firm said the quarry will employ between 40 and 50 workers

when it gets into full operation by late summer.

The quarry is being opened by the Lynchburg Stone Division of the Rockdale Stone Service Corp., of Roanoke, headed by Gordon Willis.

Around 400 acres of land has been leased or put under options by the firm. It contains from three to six million tons of limestone.

An annual capacity of 200,000 tons is anticipated, as compared to the Rockdale operations near Roanoke of 400,000 tons yearly, the president added.

Wire Screen Firm Selects Site For \$1-million Plant In Miss.

A new \$1,000,000 plant will be established at Brookhaven by the Standard Wire Cloth and Screen Company of York, Pennsylvania, the Brookhaven-Lincoln County Chamber of Commerce has announced.

The new industry would be partially financed under provisions of the BAWI law for which a bond issue is expected to be called soon.

The plant will be erected on a 14-acre site on an old airport just north of the modern Johnston Lawnmower Corporation plant. It will employ about 300 persons, 80 per cent of them men.

Brookhaven was selected after company officials weighed the merits of a dozen other Mississippi communities and sites in surrounding states. The new plant will incorporate equipment of all of one of the company's present plants and about half of the operations of another.

Modern St. Louis Bank Features Roof-top Banking

The bank of tomorrow opened last month in St. Louis.

It is one of the world's most unusual banking structures and the first designed for roof-top, drive-on banking.

According to Philip C. Kopitsky, board chairman of the State Bank & Trust Co. of Wellston, St. Louis suburb, two roof-top "Snorkels" built by the Mosler Safe Company make the unique banking service feasible.

Snorkels make it possible for motorists to drive onto the roof of the bank and transact their business in seconds without leaving their cars.

The teller in each bullet-proof Snorkel is stationed 17 feet below the roof on the main banking floor. A system of two-way speakers and periscope-type mirrors enable the teller and customer to see and speak to each other. Each unit has a roof with a five-foot overhang to protect the customer during inclement weather.

Built on the roof, the Snorkel looks like a king-size TV screen. It was intended by Mosler for fast curb-side banking in heavily congested areas, but architect Bernard Bloom of St. Louis, who designed the building, saw that the Snorkel would be ideal for roof-top service.

Construction was handled by the George L. Cousins Contracting Co., under Bloom's direction.

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Oklahoma City Firm Makes Dry Cleaning Equipment

Soaps, cleansing fluid, machines and methods that were in standard use by the dry cleaning industry in 1920 are obsolete today. The ultimate in modern equipment is a commercial laundry machine manufactured by Midwest Laundry and Supply Co., Oklahoma City.

The firm was organized in 1947 as a dealer agency under the name of Midwest Cleaner Supply Co. In 1949 the name was changed and the manufacture of conventional commercial laundry and dry-cleaning machines begun.

About 13 months ago the company built its first combination washer and extractor, and within a year about 20 of their machines were in operation throughout the country.

The machine sells for \$4,000, considerably underselling similar machines, which cost from approximately \$10,000 to \$15,000.

Midwest makes several models on an individual order basis. The machines have a capacity of 1,200 pounds of clothes on an average day. They are powered by two electric motors which perform the washing and extracting operations at 25 and 620 revolutions per minute, respectively.

Westinghouse Expands Electronic Facilities in Maryland

A new major expansion by Westinghouse Electric Corporation in the Friendship, Md., area was revealed when plans for construction of a combined manufacturing plant, engineering and office building for production of military electronic equipment, were announced by the company.

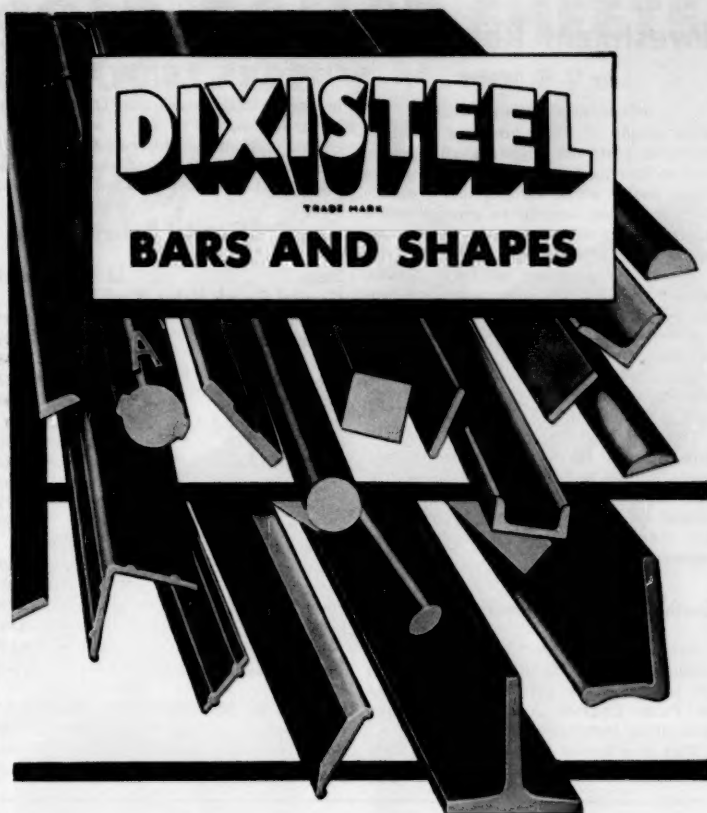
Site of the proposed electronics division structure is adjacent to the air arm plant on Fort Meade Road on land purchased by the company in 1950. It will comprise a total of 350,000 square feet with 210,000 square feet being devoted to manufacturing space and the remaining 140,000 square footage to engineering and office facilities.

Missouri Pacific Lines Reorganization Approved

Federal District Judge George H. Moore has approved the 1954 plan of reorganization of the Interstate Commerce Commission for the Missouri Pacific Lines. This is essentially the plan negotiated with the help of Guy A. Thompson, Trustee of all of the Missouri Pacific debtor companies. A vote will now be taken of the creditors and stockholders for their acceptance or rejection. If two-thirds of each class voting approve, an order of confirmation will be entered.

After accounting for all charges, Missouri Pacific System net income for January, 1955, was \$885,051, compared with net income of \$102,692 for January, last year.

Gross revenue: For January, 1955, totaled \$22,899,076, compared with \$23,281,392 for January, last year.



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Investment Return

by C. R. Walker

(Continued from page 24)

sists chiefly of Food products in which material costs are higher than average and income producing payrolls are lower than usual, while Connecticut's manufacturing runs largely to groups which are higher (proportionately) in labor income than in material costs.

A similar situation exists in Trade, with South Dakota doing a higher proportion of Wholesale trade with its slower moving inventories and lower labor income.

But when it comes to Farming, there can be wonder at Connecticut's better return.

Detailed analysis brings out two reasons: South Dakota farm lands rate much higher in value, compared to output, and Connecticut relies to a large extent on high profit truck crops which are readily marketed in nearby urban centers.

South's Problem Complex

Probably the most noteworthy fact brought out by the detail, however, is the relatively low rate of return earned on Farm Capital Goods, as compared with other industries.

This is a factor that applies not only to the leader and tallender but to all

states alike, and forms one of the bases for the low income ratings of Southern states.

It is not by any means the only factor, however, that enters into the Southern income picture.

This fact can be illustrated by another comparison—one between the Blue Book South and the United States, as follows:

Capital Return

Data	U. S.	South
Capital Goods Value (\$ mil.)		
Farming	\$ 74,910	\$ 24,747
Manufacturing	109,434	26,199
Trade	60,308	16,565
Other Industry	147,227	42,387
Total Industry	391,876	109,898
Income (\$ mil.)		
Farming	15,234	5,855
Manufacturing	86,967	16,386
Trade	53,156	14,806
Other Industry	31,780	24,253
Total Industry	237,137	61,300
Return (%)		
Farming	20.3	23.7
Manufacturing	79.5	62.5
Trade	88.1	89.4
Other Industry	55.5	57.2
Total Industry	60.5	55.8
Per Capita Income (\$)	1,471	1,133

It can be noted that when it comes to return on Capital Goods investment, the South actually shows to slight advantage in the Farming category. This is due

largely to lower land values in the South and agricultural output that finds market in nearby industries and centers.

The Region also has an edge in "return" with respect to Trade and Other Industry, due largely to predominance of Retail in the Trade category and Mining in the other category.

These advantages are largely offset by lower return on Manufacturing investment. In the South product value contains a considerably higher proportion of material cost and correspondingly lower element of labor income than in the average for the United States.

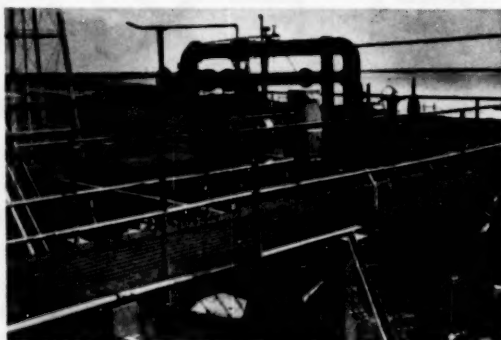
This disadvantage, however, is far from sufficient to account for the lower income status of the South.

Increase of industry other than farming is the objective to be shot for, not simply to change the structure of Southern industry but to provide ways and means of taking population away from farms.

Unless this is done—unless many in the South now dependent upon the soil for subsistence, can be induced to turn to other spheres of endeavor, no amount of industrial conversion can bring Southern incomes up to a level of those of the National average.

Conversely, even a reasonable amount of conversion that lures a substantial number of Southern farm hands into other industries will go a long way toward equalizing the income situation.

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Paper Cone and Tube Firm To Erect New Plant at Longview

Sonoco, the largest manufacturer of paper cones and tubes in the world will establish a plant in Longview, Texas to serve the southwestern market, it was announced at the headquarters offices in Hartsville, S. C., by C. W. Coker, executive vice-president of the company.

The new plant is scheduled to be built in Longview in the near future, meanwhile, movement of machinery to Longview will be started shortly, Coker stated.

The new plant will be located in the M. Clint Brown building and it was pointed out by company officials that facilities would be expanded as rapidly as the company increases its sales area in the Southwest.

Sonoco's new Longview plant will have the most modern production equipment, Coker said, and all employees of the factory will be recruited from the Longview area with the exception of supervisory personnel.

Celanese Corp. to Build Research Center in Charlotte

Celanese Corp. of America will build a new textile fiber research and development center on a 114-acre site in Charlotte, N. C., Harold Blancke, president, said.

The center will supplement research now being conducted at the Celanese laboratories in Summit, N. J.

\$29-million Contract for Tunnel Under Baltimore Harbor Let

Award of a \$29,894,081 low-bid contract to Merritt-Chapman & Scott Corporation of New York for construction of a twin-tube tunnel beneath Baltimore Harbor has been announced by the Maryland State Roads Commission.

The trench-type tunnel, about 6,300 feet long, will run from a point on the south shore of the Patapsco River east of Childs Street, in the Fairfield section, to a point on the north shore immediately east of Clinton Street. Each of the twin tubes will carry two lanes of traffic.

Designed by Singstad & Baillie, contracting engineer with the J. E. Greiner Company of Baltimore, consulting engineers for the project, the bottom of the tunnel will be about 101 feet below the river's surface at the deepest point. The roadway will be 89½ feet below the surface at that point.

The 1.7-mile tunnel, including entrance ramps, together with about 14.3 miles of approaches, will provide an express route through the southeastern and eastern sections of Baltimore, linking Routes U.S. 1 on the south with U.S. 40 on the north. Work on the tunnel will get under way in about 10 days and present plans call for completion of the project by December 1, 1957.

A trench-type tunnel is one that literally is floated into place. Its core is made up of massive sections of steel tube. These are fabricated ashore and launched like so many ships. The sections then are lined with inner rings of concrete, floated into position, sunk, locked to each other in a dredged trench, and covered with backfill. Then the watertight bulkheads on each section are removed and interior work consisting of the tiling, lighting and wearing surface for the roadway is completed. When a tunnel is bored through rock or soil beneath the water—like the Lincoln Tubes beneath the Hudson River in New York—it is called a driven shield tunnel.

Each tube of the Baltimore tunnel will have a two-lane roadway 22 feet wide, a 2 foot, 2½-inch walkway, and a vertical clearance of 14 feet.

Forty-two units of steel tube casing, each approximately 300 feet long, will go into construction of the tunnel in 21 twin-tube sections.

The 21 twin-tube sections will be fabricated under sub-contract from Merritt-Chapman & Scott at three different shipyards—nine at the Camden, N. J., yard of the New York Shipbuilding Corporation, a subsidiary of M-C&S; eight at the Sparrows Point, Md., yard of the Bethlehem Steel Company, and four at the Baltimore yard of the Maryland Drydock Company.

Another major sub-contractor will be the Arundel Corporation of Baltimore, which will do the dredging work for the tunnel.

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Armstrong Cork to Double Macon, Georgia, Facility

Armstrong Cork Company—producer of building materials and flooring products, industrial specialties, and packaging products—will expand its Macon, Ga., plant to double its present capacity, making it one of the largest fiberboard mills in the world, it was announced today.

Architectural contracts have been let, construction is expected to begin this summer, and completion is scheduled for mid-1956.

The expansion plans were announced by H. R. Peck, Vice-President and General Manager of Armstrong Building Materials Operations, at the opening session of the eighth annual meeting of the company's wholesale distributors of building products.

The Macon Plant, along with the company's other fiberboard factory at Pensacola, Florida, produces a line of building products serving primarily structural, insulating, acoustical, and decorative functions.

The expansion will add approximately 212,000 square feet to the 300,000 square feet of floor space in the present plant, which started operating in 1948. The present buildings will be enlarged and a second board mill will be set up alongside the existing mill; additional grinding, pulping, screening, forming, drying, fabricating and painting equipment will be installed; the wood yard will be rearranged; and warehousing and shipping

facilities will be approximately doubled, involving the re-laying of almost a half-mile of railroad track. As part of the expansion program, a water recovery system will be installed.

Contracts for building design and electric power facilities have been let. Most of the general engineering work is being done by Armstrong's Engineering Department.

Walter E. Hoadley, Jr., Armstrong Treasurer, in an address at the meeting on the company's building products expansion plans, stated that "underlying all of our plans in the building materials business is the firm conviction—based upon careful study—that building offers tremendous opportunities for longer range growth in sales and profits. The future indicates a growing use of 'manufactured materials'... materials that are sometimes called wood substitutes, or manufactured parts of a house."

\$1-million Electric Steel Plant To Be Built by Roanoke Group

A million dollar electric steel mill will be erected in Roanoke County by a new company conceived and financed by local businessmen.

Plans for the new venture were announced by John W. Hancock, Jr., president of the firm, Roanoke Electric Steel Corp., who said "It is a completely local deal, using local scrap, local money and local area sales."

The new plant will be built on a 19½-

acre tract which borders Peters Creek, the city-county line at that point, and the Norfolk and Western Railway's West End Yards. It lies between Shenandoah avenue and Roanoke River.

Clifton A. Woodrum, attorney for the new firm, said application for a corporation charter has been made. Company officials hope to have the mill in production by Jan. 1 turning out 25,000 tons of high grade steel annually.

It will be the first mill of its type in Virginia, using an electric furnace that produces its own steel billets—a semifinished bar used in rolling out finished pieces of steel.

The mill site is owned by the Norfolk and Western.

Hancock said the railroad has been "most helpful" in the venture which, among other things, will open up a big market for junked automobiles in this part of the state.

One-third of the raw materials will be junked cars hammered into bales. Hancock said. The balance will be divided between heavy steel, such as beams, and machine turnings and borings.

Now, according to the president, most of this stuff is being shipped to Pittsburgh and then shipped back into this section in the form of new steel.

The new firm expects to find a market for all of the mills output in a 100-mile radius of Roanoke. Part of it will be used, for instance, by Hancock's present firm—John W. Hancock, Jr., Inc., steel joint fabricators, located at 427 McClanahan St., SW., Roanoke.

The plant will employ about 100, all of them local workmen with exception of several technical men.

Atlanta Envelope Firm Plans \$100,000 Expansion

Atlanta Envelope Company, Atlanta, Georgia, announced the erection of 10,000 additional square feet of space adjoining its present building. The new area, scheduled for completion by June, will house special equipment for new and expanded operations.

The company's Atlanta building was erected only three years ago as a modern "showplace" of envelope manufacturing. Over \$100,000 will be invested in the new facilities including machinery installations.

\$2-million Expansion Planned By Quaker Oats in Missouri

The Quaker Oats plant at St. Joseph, Missouri, plans expansion of its grain and flour storage facilities at an estimated cost of more than \$2,000,000.

C. R. Martin, manager of the St. Joseph plant, said the firm will construct a million and a half-bushel grain elevator and a new flour mill warehouse with an area of 16,000 square feet.

He estimated the expansion would mean only nominal addition to the plant's present 900 employees.

The projects were expected to be completed during the first half of 1955, according to Mr. Martin.

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FINANCIAL NOTES

In the annual report to stockholders, W. E. Dillard, president and general manager of the **Central of Georgia Railroad**, reported that the company closed the year of 1954 with an increase in net income for a year in which decreases in net income of railroads were the general rule.

The net income for 1954 was \$2,764,082.00 compared with \$2,727,201.00 for the previous year, an increase of \$36,881.00. The operating ratio for 1954 was 81.40 against 80.45 for 1953. The net income for 1954 before provision for mortgage bond sinking funds, was equivalent to \$16.97 on the Preferred Stock and \$6.05 on the Common Stock of the company.

The dividend arrearage of \$15.00 per share on the Preferred Stock was paid in 1954; and on January 21, 1955 a \$5.00 dividend was declared on the Preferred Stock for the year 1954, payable \$1.25 quarterly during 1955.

Progressive improvement each quarter during 1954 in the earnings of **National Container Corporation** were disclosed in the profit and loss statement, issued recently.

Sales established a new peak at \$75,601,294 for 1954, compared with \$63,226,596 in 1953. Net income, after taxes, amounted to \$3,527,769 for 1954, compared with \$3,600,191 the previous year. After preferred dividends, the 1954 earnings

were equal to \$1.01 per share on the 2,909,033 common shares outstanding at the end of the year. This compared with \$1.07 per share earned in 1953 on 2,808,862 common shares then outstanding.

Directors of Georgia's largest bank, the **Citizens & Southern National Bank** recommended increasing capital and surplus from \$17 million to \$25 million, largest in the Southeast.

Following the bank's board meeting in Savannah, Mills B. Lane, President of the bank, said:

"For years, people in our region have worked and hoped for a Southeastern bank with \$25 million capital. We hope this goal will become fact before June 1."

The C&S directors recommended:

1. Sale of 200,000 additional shares of common stock at \$30 a share to raise \$6 million in new money;
2. Transferring enough funds from undivided profits and contingency reserves to give the bank capital of \$9 million and surplus of \$16 million;
3. Raising the regular and extra dividends of the Citizens & Southern National Bank from an annual rate of \$1.35 to \$1.50.

Stockholders will be asked to vote in favor of the recommendation at a special meeting April 12, following which rights will be issued allowing stockholders 30 days to subscribe to two new shares for

every seven shares they own, Mr. Lane said.

United States Steel Corporation, in its Annual Report for 1954 just released, records a 21 per cent decline in ingot production for that year from the record-breaking level of 1953 with a 12 per cent drop in income dollars.

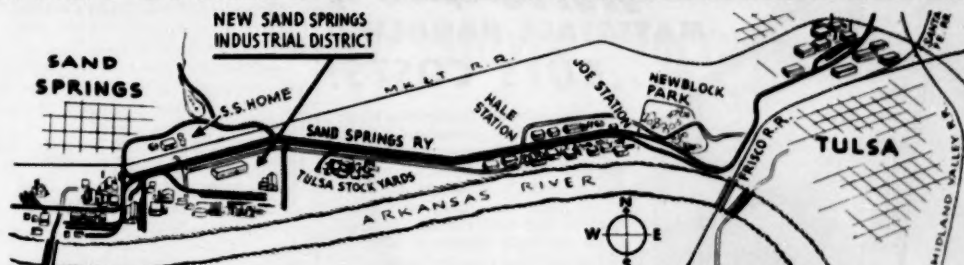
Maintenance of a relatively high income, the report states, partly was due to: 1—Termination of the excess profits tax, 2—more efficient facilities (\$2.5 billion spent since 1945) and, 3—the orderly manner in which management anticipated and carried out plans for meeting a year of adjustment.

Sales in the year were \$3,250.4 million and income was \$195.4 million, or a 6 per cent return on sales, according to the report. A breakdown shows that receipts from customers were \$6.66 per manhour, with employment costs running \$2.84 and the costs of products and services purchased at \$2.32. Stockholders received in dividends 23 cents per employee manhour, while 17 cents of the \$6.66 received from customers per manhour was reinvested in the business.

During the year U. S. Steel spent \$227.4 for modernization and additions to its facilities, making a total of \$2.5 billion for such expenditures since the end of World War II, the report discloses. As of De-

(Continued on next page)

Nearly 100 Industries Selected Oklahoma's SAND SPRINGS—TULSA Industrial District!



WHO THEY ARE . . .

Commander Mills, Inc., South West Box Co., Kerr Glass Mfg. Corp., American Smelting and Refining Co., Southwest Porcelain Steel Corp., Pedrick Laboratories, Inc., Orbit Valve Co., National Tank Co., Frank Wheatley Pump and Valve Mfr., Lock Joint Pipe Co., General Paint Corp., American Steel and Wire Co., Bethlehem Steel Co., Lincoln Electric Co., Southwest Steel Corp., Standard Magnesium Corp., Standard Aluminum Co., Enardo Mfg. Co., Sheffield Steel Corp., The Boardman Co., Youngstown Steel Products Co., Mo-Vi, Inc., Boyles Galvanizing Co., Stanley Home Products Co., Santa Fe Engineering and Equipment Co., The Fibercast Corp., Grover Tank & Mfg. Co. and many others.

WHAT THEY MAKE . . .

Products manufactured and distributed in the national market (many of them exported) by the Sand Springs-Tulsa area companies include Textiles, Fruit Jars, Corrugated Boxes, Zinc Products, Steel, Electric Fixtures, Chemicals, Canned Foods, Janitor Supplies, Meat Products, Petroleum Products, Dog Food, Porcelain Enameled Steel, Paints and Varnishes, Building Materials and many others.

WHY? FACTORY SITES • TRACKAGE • WAREHOUSES • ABUNDANT WATER • NATURAL GAS • ELECTRIC POWER • SATISFACTORY LABOR-LIVING CONDITIONS • COMPLETE BELT-LINE FREIGHT SERVICE — Direct connections with Frisco, Santa Fe, Katy and Midland Valley Railroads.

Write for Complete Information

SAND SPRINGS HOME INDUSTRIAL DEPT., SAND SPRINGS, OKLA.

FINANCIAL NOTES

(Continued from page 55)

cember 31, 1954, the amount required to complete all replacements and additions authorized was estimated at \$360 million, compared with \$327 million for the corresponding date a year earlier.

Norfolk and Western total income was 11 per cent less in 1954 than in the previous year but increased efficiency helped cut the decline in net income to about six per cent, according to the railway's annual report issued this month.

The revenue slump was attributed principally to a sharp drop in coal tonnage produced along N. & W. lines in the first nine months of last year.

The road reported a gross income of \$180,845,454 and a net income of \$26,291,200 in 1954, compared with \$203,634,371 and \$28,077,420 in 1953. Balance of income (net income after deduction of preferred stock dividends, sinking funds and other charges) was \$24,953,216 in 1954. Earnings per common share were \$4.52, compared to \$4.83 the previous year.

Operating and other expenses decreased over twenty million dollars, or 11.66 per cent despite increased wage rates and reduced freight revenue per ton mile. N. & W.'s transportation ratio—the percentage of operating revenues used to carry freight and passengers—was 31.57, among the lowest of major

railroads. New records were made in freight train speed and in average freight train tonnage. Both yard and road locomotives set new marks for low fuel consumption. Despite its mountainous territory the N. & W. again was among the best larger American railroads in gross ton miles per train hour, a measure of efficiency which takes into account both train tonnage and train speed.

The railway originated only 37.5 million tons of bituminous coal compared with 42 million tons in 1953 but this decline of 10.7 per cent was less than the national average. The N. & W. originated 9.6 per cent of all bituminous coal mined in the country, highest figure since 1941. The road hauled 4.9 million tons for export in 1954, compared with 4.1 million the year before.

Capital expenditures during the year for property improvement and equipment amounted to nearly \$18,000,000, bringing the total of such expenditures completed or authorized since 1945 to \$227,418,000—all financed without borrowing any money.

The report listed scores of such improvements including a large addition to grain elevator at Norfolk, new yard and shop facilities at Lamberts Point (Norfolk), Petersburg, Bluefield, Portsmouth, Ohio and Columbus, a steam turbine electric locomotive, new freight cars, and

track, signalling, station and miscellaneous safety projects. It noted that almost 80 per cent of all tracks are now laid with rail weighing 130 pounds or more per yard.

The railway's taxes amounted to \$27,492,170, or \$4.89 per share of common stock. Taxes amounted to \$1,510 for each employee and exceeded net income by \$1,201,000.

After \$887,000 was appropriated for dividends on the adjustment preferred stock, the company paid common stock dividends of \$19,691,000, or \$3.50 per share. It was the fifty-eighth consecutive year with dividends on adjustment preferred stock and the fifty-fourth consecutive year with dividends on common stock.

Total consolidated earnings of Cities Service Company and subsidiaries in 1954 were \$60,397,240, of which \$43,724,163 was net income and \$16,673,077 was consolidated profits from the sale of the remaining Cities Service domestic utility interests. W. Alton Jones, Chairman of the Board, reported to stockholders.

The total earnings of \$60,397,240 were equivalent to \$15.23 per share. The net income of \$43,724,163 was equivalent to \$11.02 per share in 1954, as compared with net income of \$50,720,779 or \$12.79 per share in 1953 on shares outstanding December 31, 1954.

Consolidated gross income in 1954 was \$826,325,984 compared with \$845,940,982 in 1953, these amounts reflecting the elimination of the gross earnings of utilities sold in 1954.

"Florida, Land of Sunshine" is the title of Florida Power & Light Company's attractive 1954 annual report which has gone out to its stockholders.

The company's own figures help reflect how Florida is outstripping the rest of the nation in rate of growth through its depression-resistant, year-around tourist industry backed by an expanding manufacturing empire.

Since 1945, FP&L statistics show: Plant capability has been increased 253 per cent against 105 per cent for the nation.

Customers have increased 138 per cent, compared to 50 per cent for the country as a whole.

Electric sales are up 244 per cent, compared with 112 per cent for the nation. To keep ahead of Florida's rapid growth, FP&L stockholders are being told that the utility:

Spent a record breaking \$41.7 million on new construction during 1954.

Added 747 miles of distribution lines during the year.

The 1955 construction budget will boost construction for the first four years of its \$410 million, 10-year program to \$150 million.

Common stock earnings were equivalent to \$3.50 per share. Common stock dividends were \$1.75 per share, the balance being used by the company for its tremendous construction program.



WISCONSIN-POWERED LAD-E-VATOR Hoist Speeds Up MATERIALS HANDLING ...CUTS COSTS!

This ingeniously designed extension hoist lifts materials up as high as 80 ft. in one minute, according to the builder, Campbell Equipment Co., Chicago, Ill. Provides easy, one man, one hand control and delivers all kinds of loose and bulk materials directly to the working area for automatic dumping or removal by workmen. Designed for use on construction or storage jobs, it eliminates dangerous swinging buckets and risky reaching operations. Can be used with platform, wheelbarrow or scoop, carrying up to 1,000 lbs. per load.

This is another typical assignment for the dependable foolproof Lugging Power of Wisconsin Heavy-Duty AIR-COOLED Engines... power that Fits the Job and the Equipment, delivering maximum on-the-job service with minimum servicing. You can't do better than to specify "Wisconsin Engine Power" for the equipment you design and build.



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World's Largest Builders of Heavy-Duty Air-Cooled Engines
MILWAUKEE 46, WISCONSIN

WHO'S WHERE

R. S. Abrams, of Tonawanda, New York, has been appointed Plant Manager of the new **Linde** silicones plant at **Long Reach, West Virginia**, according to a recent announcement by **Linde Air Products Company**, a Division of Union Carbide and Carbon Corporation. Mr. Abrams was previously Manager of Silicone Production and Development at Linde's Tonawanda facilities.

Other assignments announced by the Company include: **J. J. Doub**, Superintendent of Production; **Herbert Wickman**, Superintendent of Administration; **H. C. Givens**, Chief Chemist; **G. M. Fowles**, Plant Engineer; **J. W. Ramsey**, Office Supervisor; **J. P. Daneman**, Purchasing Agent; and **J. J. Hock**, Industrial Relations Representative. All are being transferred from Tonawanda, where Linde has been producing silicones for several years.

Gerald Haywood, director of the **Luke, Md.**, research laboratory of **West Virginia Pulp and Paper Company**, has been promoted to the position of technical assistant to the director of technological research and development of the company, it was announced.

A veteran of 40 years of research for the company, Mr. Haywood holds a number of important patents in the fields of

pigments and machine coating of paper. He holds an honorary Doctor of Science degree from Centre College.

Several men have been named in field personnel changes announced by the **B. F. Goodrich Company Tire & Equipment Division**.

Clare E. Sears, formerly district manager at Washington, has been transferred to **Charlotte** in the same capacity.

William A. Hays, formerly New Orleans district manager, is the new district manager at **Washington**.

Clarence W. Harp, formerly a wholesale supervisor at Atlanta, has been promoted to district manager in **New Orleans**.

William E. Childress, formerly a wholesale supervisor, has been promoted to district manager at **Dallas**.

In other appointments, **Miles E. Collins** has been named manager of retail operations for the **Atlanta, Birmingham, Memphis and New Orleans districts**.

William B. Phillips has become manager or retail operations for the **Charlotte, Jacksonville, and Washington districts**.

Ted Curry is the new manager of retail operations for the **Kansas City, Omaha, and St. Louis districts**.

A reorganization of the Industrial Relations Department at **Wheeling Steel Corporation** was effective recently, according to **L. H. Brown**, Assistant Vice President.

Chandler G. Lewis will continue as chief industrial engineer, and **Wayne T. Brooks** will serve as Director of Labor

Relations. **R. S. Carnahan** has been named Personnel Director, and **E. A. Rutledge** has been named Assistant Personnel Director. These are all staff positions serving the Operating Division of **Wheeling Steel**.

Macon, Dublin & Savannah Railroad Company has announced recently **Mr. Marion T. Sanders** is appointed **General Agent, Birmingham, Alabama**, succeeding **Mr. Claud E. Shannon**, whose retirement has been announced.

Marion Shaw has been appointed field service representative in the **Richmond, Va.**, area for **Whirlpool Corporation**, it was announced by **Chet Worthington**, parts and service manager. The appointment is part of an expansion program of the service administration department of the company, and increases to 14 the number of field service areas.

Distributors in the **Richmond** field servicing area include **Goldberg Electric Products Co.**, **Richmond**; **McClain & Pleasants, Inc.**, **Charlotte, N. C.**; **Associated Distributing Co.**, **Columbia, S. C.**; **Banks-Miller Supply Co.**, **Huntington, W. Va.**, and **Nash-Steele-Warren, Inc.**, **Raleigh, N. C.**

Jack D. Tolliver has been appointed manager of the recently established **Sales Development Division of Tube Turns, Louisville, Ky.**, the nation's oldest and largest manufacturer of welding fittings

(Continued on next page)

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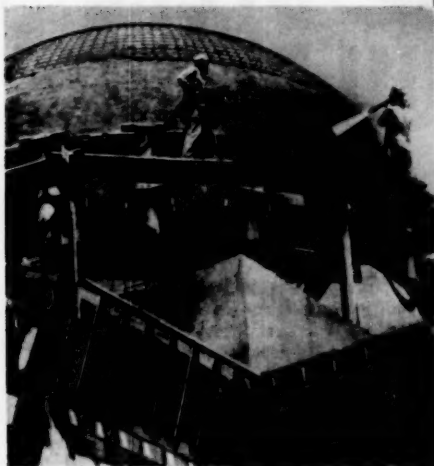
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WHO'S WHERE

(Continued from page 57)

and flanges for industrial piping systems. The announcement was made by John G. Seiler, executive vice president and general manager of Tube Turns, a division of the National Cylinder Gas Company, Chicago.

Tube Turns' Sales Development Division succeeds the company's Engineering Service Division, formed in 1945, and will be staffed with the same personnel.

Appointment of **Charles S. Gregory** to assistant general freight agent in New Orleans touched off a series of promotions in GM&O's Traffic Department.

Succeeding Gregory as division freight traffic manager at Birmingham, Alabama, is **Glenn Keen**, who is replaced at Montgomery, Alabama, as division freight traffic manager by **George D. Villar**. Promoted to commercial agent at Jackson, Mississippi, in Mr. Villar's place is **J. F. Brown**, formerly of Kansas City, Missouri. At Kansas City, Chief Clerk **J. W. Smith** was promoted to freight traffic agent.

Harold W. Parker of Dover has been appointed sales representative for **Stone Container Corporation** for the states of Delaware, Maryland and Virginia, according to **David R. Lepper**, vice president

and general manager of the corrugated box firm's Eastern Division, Philadelphia.

J. H. Loomis has been appointed Manager of **Worthington Corporation's** St. Louis office as announced recently by W.



J. H. Loomis

A. Meiter, General Sales Manager of the Corporation. Previously, Mr. Loomis had been serving as General Line Salesman and Compressor Specialist at the Worthington Chicago District Office.

F. A. Mack, former manager of the St. Louis Office, has been appointed Special

Representative in which capacity he will devote his full time to the development of business through special customers and assignments.

Mr. Richard G. Thomson has been appointed Traffic Representative for **Mercury Motor Express, Inc.** with headquarters at Atlanta, Georgia, it was announced.

Mr. Thomson will handle the central Georgia territory out of Atlanta. His headquarters will be 683 Humpries St. S. W., Atlanta.

Mr. Robert M. Fritz has been appointed sales representative, **C. T. Fuller**, Southwestern District Sales Manager for **Wolverine Tube, Division of Calumet & Hecla, Inc.**, announced recently.

Mr. Fritz will contact petro-chemical processors and refiners in Oklahoma and North Texas. He will headquarter in Wolverine Tube's Tulsa Oklahoma office: Tulsa, Oklahoma.

H. Clay Hansen has been appointed agricultural specialist in the **Arkansas Fertilizer District** for **Olin Mathieson Chemical Corporation**, **R. M. Morehead**, district sales manager, has announced. His headquarters will be at the Olin Mathieson plant in North Little Rock.

The new assignment will be largely in Arkansas. He will work with the various agricultural agencies in the state and with Arkansas banks to assist them in their agricultural programs.



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BUSINESS NOTES

Mr. H. L. Simmons, president of **Sarco Company, Inc.**, announced recently that **Hoffman & Hoffman Company** succeeded the Royster H. Johnson Company as their sales representative in **North and South Carolina**.

The new Sarco sales representative, **Hoffman & Hoffman Company**, has sales offices in Greensboro, N. C., Raleigh, N. C. and Columbia, S. C.

William L. Krapf, Manager of **Bulkley, Dunton Processes, Inc.** of New York City announced the appointment of **Rawson & Company of Houston, Texas**, **R. R. Rothrock of New Orleans, Louisiana**, and the **Henry P. Thompson Company of Cincinnati, Ohio** as representatives for Bulkley, Dunton equipment.

Joseph T. Ryerson & Son, Inc., a wholly owned subsidiary of **Inland Steel Company**, of Chicago, Ill., has acquired the plant and stocks of **Arthur C. Harvey Company, Boston**, steel and aluminum distributor, according to an announcement by Charles L. Hardy, Ryerson president. Ryerson plans to consolidate its Greater Boston operations at the Harvey plant, Everett st. and Harvey Steel rd., Allston district, Boston.

Acquisition of **Brooks Equipment and Manufacturing Co.** by the **Ingersoll Kalamazoo (Mich.) Division of Borg-Warner Corp.** has been announced. The Brooks company, whose plant in **Knoxville, Tenn.** makes the Brooks Load Luger, a materials handling device, will be operated as a subsidiary of Borg-Warner.

President of the new subsidiary will be J. H. Ingersoll, who also is President of the **Ingersoll Kalamazoo, Ingersoll Products and Ingersoll Conditioned Air divisions of Borg-Warner**. R. F. Schutz has been named Vice President of Brooks.

Mr. R. A. Schoenfeld, Sales Manager of the **Wheelco Instruments Division, Barber-Colman Company**, Rockford, Illinois, announces the appointment of the **R. H. Wittbold Company, 1951 Richmond Avenue, P. O. Box 6061, Houston 6, Texas**, as an exclusive representative for the sale of **Wheelco Industrial Instruments and Combustion Safeguards** in the Houston area.

Swieco, Inc., 1512 E. Lancaster, Fort Worth 3, Texas, has been appointed the exclusive representative for **Wheelco Industrial Instruments** in the Fort Worth area.

Appointment of **Southern Engineering Service, Inc.**, International Airport, Miami 48, Florida, as authorized distributor of Parker o-rings is announced by D. W. Holmes, sales vice president of **The Parker Appliance Company, Cleveland, Ohio**.

Henry Weaver, vice president of **Southern Engineering Service**, reports his firm will stock a range of sizes and kinds of o-rings for prompt servicing of needs in the Florida area.

Expansion of the Cummins regional organization has been announced by **Cummins Engine Company, Inc.**, of Columbus, Indiana, with the opening of the **Piedmont Regional Office at Greensboro, North Carolina**.

In charge of the Piedmont Region, which consists of the States of Virginia, West Virginia, North and South Carolina, is R. R. MacDonald. Mr. MacDonald's headquarters in Greensboro will be at 601 North Elm Street.

Kenneth C. Meinken, president of the **Electronic Tube Corporation**, Philadelphia, 18, Pa., announces the appointment of new sales representatives as follows: Harvey Teplitz, who will handle ETC sales in Ohio; **Arthur H. Lynch & Associates**, state of Florida; **Floyd Fausett & Son**, states of Alabama, Georgia, Mississippi and Tennessee; and **S. S. Lee Associates**, states of Maryland, North Carolina, South Carolina and portions of West Virginia.



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REMEMBER—Architects and engineers are professional advisors. Regardless of what type of construction you are interested in, consult them. They will be glad to help you build better.

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Kentucky Chemical Plant Sets High Safety Mark

Over 2 million man hours without a lost-time accident is the record proudly held by B. F. Goodrich Chemical Company's Louisville, Kentucky, installation, according to J. L. Nelson, plant manager.

The last disabling injury occurred on September 3, 1953, said Nelson. Since this time, over 15 months ago, some 2,200,000 man hours have been worked without a lost-time accident at the large plastic and rubber-making plant of BFG Chemical.

Nelson said that, contrary to popular belief, the chemical field ranks among the top nine industries of the country in safety.

Monsanto Producing Polyethylene Commercially at Texas City

Monsanto Chemical Company's Plastics Division is producing polyethylene commercially at Texas City, Tex., it was announced by E. S. Childs, sales manager of the product.

Polyethylene is the newest in the lineup of Monsanto plastics.

Childs reported that as production increases to capacity level, the company expects to offer a full line of resins and compounds suitable for bottles, coatings, film, wire insulation, cable jacketing and pipe.

"Monsanto's first entry into polyethylene," Childs said, "is based on a high-

pressure process. However, the company has been and is conducting extensive research into a low-pressure polymerization process. This is expected to produce a type of polyethylene with properties which will allow its application in entirely new fields. Principle advantages of a low-pressure material are higher heat distortion permitting sterilization and increased strength."

Commenting on increased competition as additional suppliers of polyethylene enter production, Childs said: "Present markets for the material have yet to be fully satisfied. Keen competition that is in evidence already will force resin machinery and production efficiency development programs into high gear. The next two or three years of polyethylene's growth should witness more advances than have taken place during its previous 15-year history."

Nicolas Cotton Mills Plan Expansion For Alabama Plant

Plans for a \$500,000 expansion of the Nicolas Cotton Mills in Opp has been announced by Fred M. Lyon, president.

The expansion project calls for the erection of two modern additions to the existing plant.

The new addition will give employment to approximately 125 more persons.

The Opp Cotton Mills were expanded in February of this year with the addition of a new building on the west end of the present plant with 23,224 spindles and 200 looms being added.

Fred M. Lyon, president of the two cotton mills, said that the new project would involve approximately half a million dollars.

The Opp and Micolas mills are employing 900 people at the present time and have continued to expand each year since they were established more than 30 years ago. They have an annual payroll of \$1,750,000.

NEW PLANTS

(Continued from page 16)

Page, Sutherland & Page, 602 West Ave., and C. H. Page & Son, First Federal & Loan Bldg., Architects.

AUSTIN—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., let contract to Boyer & Lagow, P.O. Box 4674, Austin, for central office building air-conditioning.

BEVERLY—Southwestern Bell Telephone Co. let contract to Wagner Construction Co., 106 W. Colorado St., Victoria, for Fleetwood "8" Dial Building, Phelps, Dewees & Simmons, 342 W. Woodlawn Ave., P.O. Box 8127, Laurel Heights Station, San Antonio, Architects.

CENTER—Southwestern Bell Telephone Co., K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas, plans addition to building.

COLORADO CITY—Southwestern Bell Telephone Co. let contract to Suggs Construction Co., P.O. Box 3409, Big Spring, for dial office building. Preston M. Geren, 1607 Fort Worth National Bank Bldg., Fort Worth, Archt.

COPPERAS COVE—Mid-Texas Telephone Co. offered bid of \$7,678 from Eakin Construction Co., P.O. Box 494, Killen, for dial building. Arthur Mathis, Jr., 329 South Texas Bldg., San Antonio, Archt.

CORPUS CHRISTI—Central Power & Light Co. plans building addition, 120 N. Chaparral St., R. L. Vogler, 225 Oleander St., Archt.

CORPUS CHRISTI—Gulf Compress, 201 N. 19th St., let contract to Edgeworth Constr.

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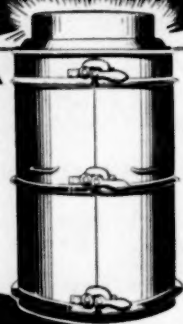
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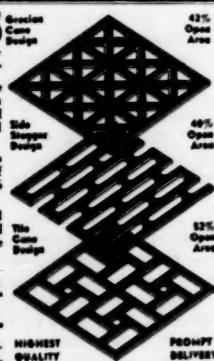
The "Ornamental" light-gauge designs here illustrated are only a few of the many you can choose from in our new Catalog 39 and we are always pleased to quote on original designs or special work of any kind.

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Co., 433 Villa Dr., at \$318,260 for two warehouses on 19th St.

CORPUS CHRISTI—J. M. Wilson received bid from A. A. Kleinsteuber, 506 Ohio St., at \$50,534 for alterations to bowling alley, 1713 Tenth St. Whitney & Tomlinson, 468 Palmero St., Archts.

DALLAS—The Shipper Warehouse & Compress Co., 2901 S. Lamar St., received bid from O'Rourke Constr. Co., 1001 Commerce St., at \$341,500 for cotton warehouse and compress, Lamar & Forrest Sts. Easterwood & Easterwood, Amicable Bldg., Waco, Tex., Archts.

DALLAS—Toole & Cunningham, Brookhollow Industrial District, received bid from Frank Riker, 6636 Maple Ave., at \$69,800 for warehouse and office building at 9000 Sovereign St. F. J. Woerner & Co., 1008 Stonewall St., Archts.

DALLAS—Wilcox Trend Gathering System, Inc., plans additional pipeline facilities to cost \$2,900,000.

EAGLE PASS—Southwestern Bell Telephone Co., c/o K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas, plans dial building on N.E. cor. of Monroe & Quarry Sts.

ELGIN—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., received bids for dial building at East 2nd St.

ENCINAL—Southwestern Bell Telephone Co., c/o K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas, plans dial building on Pearsall St.

ESKOTA—Southwestern Bell Telephone Co., 308 S. Akard St., J. A. Ganssle, Chief Engr., Dallas, received bids for repeater building, located on Abilene-Sweetwater Cable.

FALLS CITY—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., plans commercial dial office building.

FORT WORTH—S & H Green Stamp Co., c/o Walter Beinecke, Jr., 114 Fifth Ave., New York, plans warehouse and office building, Seminary Dr. & Lubbock St., to cost approx. \$500,000.

HEARNE—Southwestern Bell Telephone Co., let sub-contract to R. B. Butler, Inc., P.O. Box 471, Bryan, for addition and alterations to Linden "6" Dial Bldg., Cato, Austin & Evans, 2401 LaBranch St., Houston, Archts.

HOUSTON—Buffalo Building Corp. received bid of \$219,318 from Linbeck Constr. Corp., Box 13067, for office building at Buffalo Drive & Rosine St. Koetter & Tharp, 1103 S. Shepherd Drive, Archts.

HOUSTON—Ethyl Corp. let contract to Scheffe Constr. Co., 4000 Westheimer St., Houston, at \$83,438 for gasoline testing laboratory on W. Alabama Ave. in Wesleyan Center Kuehne, Brooks & Barr, 203 Perry-Brooks Bldg., Austin, Assoc. Archts.

HOUSTON—Houston Technical Laboratories, 2421 Branard St., plan plant and headquarters building at Richmond Road & Buffalo Speedway. Ford, Colley & Tammings, 3416-A Louisiana St., Archts.

HOUSTON—Key Club received bid from Brown Constr. Co., 5105 Avenue L, at \$23,959 for swimming pool and bath house, 2121 Sage Road, Wylie, Vale & Floyd & James, 915 Lovett Blvd., Assoc. Archts.

HOUSTON—Southwestern Bell Telephone Co., c/o K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas, plans Braeburn dial office building, corner 16th & Cypress Sts.

HOUSTON—United Gas Corp., 1120 Texas St., plans service center, Hirsch Road near Laura Koppe Road, to cost approx. \$150,000. Hamilton Brown, 2017 W. Gray Ave., Archt.

LONGVIEW—Earl Hollingsworth plans \$1,500,000 petroleum building, Wilson, Morris & Crain, 3330 Graustark St., Houston, Archts.

LUBBOCK—Armstrong Moving & Storage Co., 2303 Avenue H, Lubbock, received bid of \$141,114 from R. J. Bell & Co., Box 3117, for warehouse, Dewitt & Macker, 1203 College Ave., Archts.

MERKEL—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., received bids for repeater building, located on Abilene-Sweetwater Cable.

NEW BRAUNFELS—New Braunfels Textile Mills received bids for card and spinning building at plant site.

ODESSA—Odessa Natural Gasoline Co., plans \$1,500,000 in facilities in plant.

PFLUGERVILLE—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., received bids for community dial building.

ROSCOE—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., received bids for repeater building, located on Sweetwater-Colorado City cable.

SABINAL—Southwestern Bell Telephone Co., K. A. Ganssle, Chief Engr., 308 S. Akard St., Dallas, plans dial office building.

SAN ANTONIO—Aztec Ceramic Co., Highway 90 East, plans warehouse and offices on Highway 90 East, Dukes & Williams, 728 W. Hildebrand, San Antonio, Archt.-Engr.

SAN ANTONIO—Corona Realty Co., Inc., 815 Ave. B, received bid from Howard Bum-

baugh & Co., 1524 S.W. Military Dr., San Antonio 11, at \$71,913 for building for Universal Book-Bindery, 515 Avenue B.

SAN ANTONIO—Austin Hemphill, Inc., c/o Kearney Albaugh, 215 Travis Bldg., let contract to Gene Greiber, 216 Newberry, at \$81,713 for automobile building, 100 block San Pedro Ave.

SAN ANTONIO—St. Mary's Development Co., received bid of \$48,424 from William Matera for body and paint shop for Jordan Motor Co., 515 St. Mary's St.

SAN ANTONIO—The Stewart Co. plans office and warehouse on 30-acre site, Bartlett Cocks, 3501 Broadway, San Antonio, Archt.

SAN MARCOS—San Marcos Telephone Co., H. Y. Price, Mgr., plans telephone building, Fehr & Granger, 502 E. 5th St., Austin, Tex., Archts.

TYLER—General Electric Corp., Schenectady, New York, plans \$15,000,000 plant to manufacture home cooling units.

TYLER—National Homes Corporation, Lafayette, Ind., let contract to Peterson & Lacy, Box 474, Dallas, for manufacturing plant on 44-acre site near Tyler, estimated to cost \$1,500,000.

UVALDE—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., received bids for building addition.

VICTORIA—Southwestern Bell Telephone Co., 308 S. Akard St., Dallas, K. A. Ganssle, Chief Engr., let contract to Sam Pieper, P.O. Box 781, Beeville, for alterations to building.

WACO—International Paper Co., Milk Container Division, 220 E. 42nd St., New York, plans \$500,000 paper container factory.

VIRGINIA

COVINGTON—West Virginia Pulp & Paper Co., 230 Park Ave., New York, received bids for research laboratory building.

GLOUCESTER—Virginia Electric & Power Co. received bids for service building and facilities.

HAMPTON—Virginia Electric & Power Co. let contract to Virginia Engineering Co., Newport News, for Peninsula district service building and garage.

LYNCHBURG—Babcock & Wilcox Co., C. H. Gay, Vice-pres., New York, plans multi-million-dollar manufacturing plant to pave the way for new Atoms-for-Peace pioneering.

RICHMOND—Pepsi-Cola Bottling Co. of Richmond received bids for building alterations, N.E. corner Vine & Main Sts.

RICHMOND—Virginia Electric & Power Co. plans \$33,000,000 on new construction; additional \$11,700,000 for hydro-electric development at Roanoke Rapids, and \$7,300,000 for third generating unit at Possum Point Power station near Quantico.

WARRENTON—Nu-Tread Co. received bids for construction of sales and recapping plant, W. B. Van Bakenegem, Richmond, Archt.-Engr.

YORKTOWN—American Oil Co. let contract to Chicago Bridge & Iron Co. for large tank farm at new refinery.

YORKTOWN—American Oil Co. let contract to M. W. Kellogg Co. of New York City for multi-million-dollar refinery.

WEST VIRGINIA

BECKLEY—Col. J. Kemp McLaughlin, Chief of Staff of West Virginia Air National Guard, plans expenditure of between \$5 million and \$6 million for expansion of Raleigh County Memorial Airport for military use by Air National Guard.

MOUNDSVILLE—National Aniline Div. of Allied Chemical & Dye Corp. plans multi-million-dollar plant to produce organic isocyanates.

PARKERSBURG—The Borg-Warner Corp., Chicago, purchased 322-acre site West of City, to be used for future expansion.

FT. PLEASANT—Chesapeake & Potomac Telephone Co. plans \$183,000 expenditure for additional outside plant facilities.

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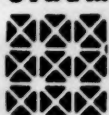


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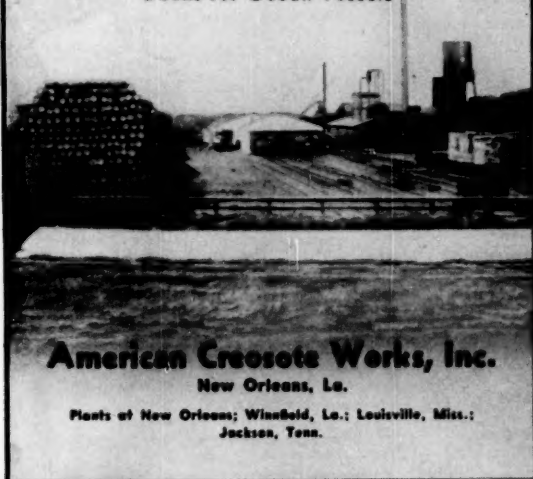
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- USS Stainless Steel.
- Ground Open Hearth Basic Slog.

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